Panasonic

KW9M
Eco-POWER METER
Advanced Type

User's Manual

Protocol manual

WUME-KW9MAP-04

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Cautions for Your Safety

Read the manual carefully before installing, running and maintenance for proper operation.

Before using, master the knowledge of the equipment, safety information and all of other notes.

This manual uses two safety flags to indicate different levels of danger.

⚠ WARNING A handling error could cause serious physical injury to an operator and in the worst case could even be fatal.

- Always take precautions to ensure the overall safety of your system, so that the whole system remains safe in the event of failure of this product or other external factor.
- Do not use this product in areas with inflammable gas. It could lead to an explosion.
- Exposing this product to excessive heat or open flames could cause damage to the lithium battery or other electronic parts.
- Do not open the secondary side of CT during power on the primary side current. It might cause electric shock or CT breakdown.

⚠ CAUTION A handling error could cause serious physical injury to an operator or damage to the equipment.

- To prevent abnormal exothermic heat or smoke generation, use this product at the values less than the maximum of the characteristics and performance that are assured in these specifications.
- Do not dismantle or remodel the product. It could lead to abnormal exothermic heat or smoke generation.
- Do not touch the terminal while turning on electricity. It could lead to an electric shock.
- Use the external devices to function the emergency stop and interlock circuit.
- Connect the wires or connectors securely. The loose connection might cause abnormal exothermic heat or smoke generation.
- Do not allow foreign matters such as liquid, flammable materials, metals to go into the inside of the product. It might cause exothermic heat or smoke generation.
- Do not undertake construction (such as connection and disconnection) while the power supply is on.
- Never remove the terminal block under applying current to load. It might cause electric shock or CT breakdown.
- Do not use at secondary side circuit of inverter. It might cause exothermic heat or damage.

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- Panasonic Industrial Devices SUNX Co., Ltd. owns the copyright of this manual.
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- Modbus Protocol is a communication protocol that the Modicon Inc. developed for PLC and Modbus is the registered trademark of Schneider Electric.
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Introduction

Thank you very much indeed for purchasing “KW9M Eco-POWER METER”.
In this manual, we explain the usage of “KW9M Eco-POWER METER” in detail.
Please use it correctly after understanding the content enough.

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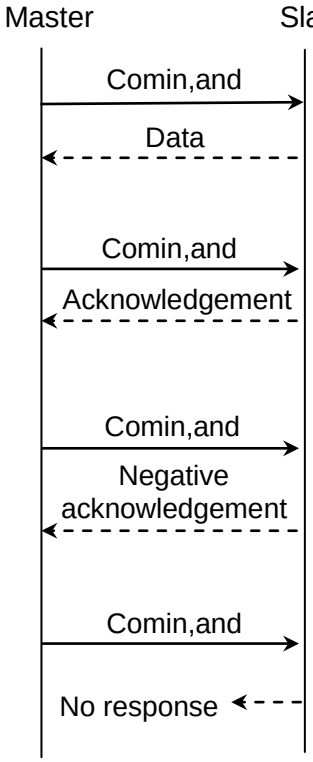
Chapter 1 Communications

1.1 Communication Procedures

Communication starts with command transmission from the host computer (hereafter Master) and ends with the response of Eco-POWER METER (hereafter Slave).



• Response with data
When master sends reading command, slave responds with the corresponding set value or current status.

• Acknowledgement
When master sends setting command, slave responds by sending the acknowledgement.

• Negative acknowledgement
When master sends a non-existent command or value out of the setting range, the slave returns negative acknowledgement.

• No response
Slave will not respond to master in the following cases.
- Global address “FF” (MEWTOCOL) is set.
- Broadcast address “00H” (Modbus protocol) is set.
- Communication error (framing error, parity error)
- CRC-16 discrepancy (Modbus RTU mode)
- CS discrepancy (DL/T645)

1.2 Communication timing

◆The minimum access time from the master is 1 sec. (Minimum time for update the data)
Eco-POWER METER may not response due to noise and so on, be sure to check that it receives the response from Eco-POWER METER.

◆In order to improve the communication quality, we recommend to send the transmission again.

Communication timing of RS485

◇Eco-POWER METER (Slave) side

When Eco-POWER METER (Slave) starts transmission to RS485 communication line, it is arranged so as to provide an idle status transmission period of about 1 to 99ms (setting available) before sending the response to ensure the synchronization on the receiving side. After sending the response, master can disconnect the transmitter from the communication line within transmission period 20ms.

◇Master side (Cautions of setting a program)

At communication, keep the following conditions.

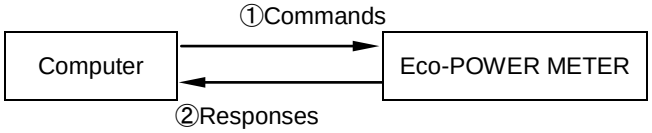
1) Set the program so that the master can disconnect the transmitter from the communication line within the transmission period of about 20ms after sending the command in preparation for reception of the response from Eco-POWER METER (Slave).
2) To avoid collision of transmissions between the master and Eco-POWER METER (Slave), send a next command after checking that the master received the response.

1.3 MEWTOCOL Communication

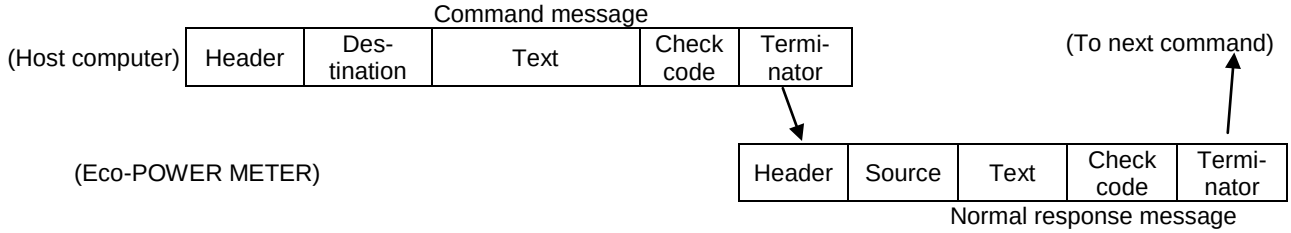
1.3.1 Overview of MEWTOCOL-COM (RS485)

◆Command and response functions

The computer sends commands (instructions) to Eco-POWER METER, and receives responses in return. This enables the computer and Eco-POWER METER to converse with each other, so that various kinds of information can be obtained and provided.



◆Command and response formats



◇Control codes

Name	Character	ASCII code	Explanation
Header	%	25H	Indicates the beginning of a message.
Command	#	23H	Indicates that the data comprises a command message.
Normal response	$	24H	Indicates that the data comprises a normal response message.
Error response	!	21H	Indicates that the data comprises a response message when an error occurs.
Terminator	CR	0DH	Indicates the end of a message.

◇Destination and source AD (H), (L)

Two-digit decimal 01 to 99 (ASCII codes)

Command messages contain a station number for Eco-POWER METER that receives the message.

When FF (ASCII code table) is used, however, the transmission is a global transmission (sent to all stations at once).

Note) When a global transmission is sent, no response to the command message is returned.

◇Block check code Bcc (H), (L)

Two- digit hexadecimal 00 to FF (ASCII codes)

These are codes (horizontal parity) that are used to detect errors in the transmitted data.

If "**" is entered instead of "Bcc", however, messages can be transmitted without the Bcc. In this case, the Bcc is included with the response

◇Error code Err (H), (L)

Two- digit hexadecimal 00 to FF (ASCII codes)

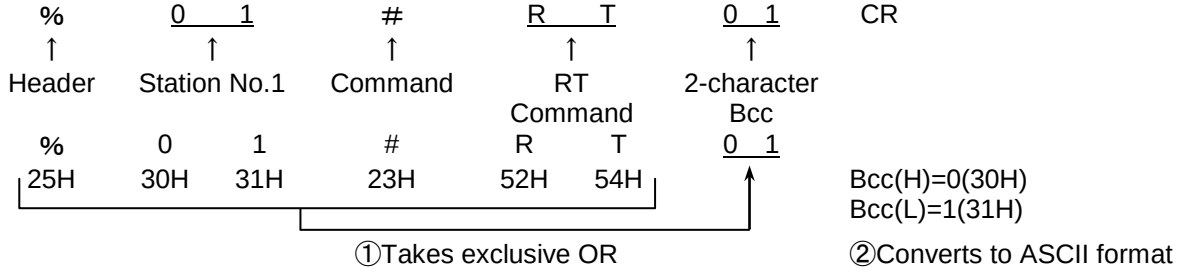
These indicate the content if an error occurs.

◆Bcc (Block Check Code)

-The Bcc is a code that carries out an error check using horizontal parity, to improve the reliability of the data being sent.

-The Bcc uses an exclusive OR from the header (%) to the final character of the text, and converts the 8- bit data into a 2-character ASCII code.

Example)



1.3.2 Data Register List

Data register	Name	Unit	Kind of data	Range	R/W
DT00002	Over current (OFF threshold)	0.1%	Unsigned 16bit	1 to 1200	R/W
DT00003	Under voltage (OFF threshold)	0.1%	Unsigned 16bit	50 to 1000	R/W
DT00004	Over voltage (OFF threshold)	0.1%	Unsigned 16bit	1000 to 1200	R/W
DT00005	Level output OUT1	—	Unsigned 16bit	0: Pulse OFF, 1:Pulse ON	R/W
DT00006	Level output OUT2	—	Unsigned 16bit	0:Pulse OFF, 1:Pulse ON	R/W
DT00007 DT00008	Active power alarm (ON threshold) OUT1	0.1kW	Unsigned 32bit	0 to 29999999	R/W
DT00009	Active power alarm target phase OUT1	—	Unsigned 16bit	0:All, 1:Phase1, 2:Phase2, 3:Phase3, 5:total	R/W
DT00010 DT00011	Active power alarm (ON threshold) OUT2	0.1kW	Unsigned 32bit	0 to 29999999	R/W
DT00012	Active power alarm target phase OUT2	—	Unsigned 16bit	0:All, 1:Phase1, 2:Phase2, 3:Phase3, 5:total	R/W
DT00013	Stand-by alarm (threshold) OUT1	0.1%	Unsigned 16bit	1 to 1000	R/W
DT00014	Stand-by alarm (start time) OUT1	1min	Unsigned 16bit	0 to 9999	R/W
DT00015	Stand-by alarm (phase) OUT1	—	Unsigned 16bit	0:All, 1:Phase1, 2:Phase2, 3:Phase3	R/W
DT00016	Stand-by alarm (threshold) OUT2	0.1%	Unsigned 16bit	1 to 1000	R/W
DT00017	Stand-by alarm (start time) OUT2	1min	Unsigned 16bit	0 to 9999	R/W
DT00018	Stand-by alarm (phase) OUT2	—	Unsigned 16bit	0:All, 1:Phase1, 2:Phase2, 3:Phase3	R/W
DT00019 DT00020	Preset OUT1	0.001	Unsigned 32bit	0 to 999999	R/W
DT00021 DT00022	Preset OUT2	0.001	Unsigned 32bit	0 to 999999	R/W
DT00023	Integral power output target phase OUT1	—	Unsigned 16bit	1:Phase1, 2:Phase2, 3:Phase3, 5:total	R/W
DT00024	Integral power output target phase OUT2	—	Unsigned 16bit	1:Phase1, 2:Phase2, 3:Phase3, 5:total	R/W
DT00025	Time program 1 (time-zone)	—	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00026	Time program 1 (start-time)	—	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W
DT00027	Time program 2 (time-zone)	—	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00028	Time program 2 (start-time)	—	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W
DT00029	Time program 3 (time-zone)	—	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00030	Time program 3 (start-time)	—	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W
DT00031	Time program 4 (time-zone)	—	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00032	Time program 4 (start-time)	—	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W
DT00033	Time program 5 (time-zone)	—	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00034	Time program 5 (start-time)	—	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W
DT00035	Time program 6 (time-zone)	—	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00036	Time program 6 (start-time)	—	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W
DT00037	Time program 7 (time-zone)	—	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00038	Time program 7 (start-time)	—	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W

Data register	Name	Unit	Kind of data	Range	R/W
DT00039	Time program 8 (time-zone)	–	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00040	Time program 8 (start-time)	–	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W
DT00041	Time program 9 (time-zone)	–	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00042	Time program 9 (start-time)	–	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W
DT00043	Time program 10 (time-zone)	–	Unsigned 16bit	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
DT00044	Time program 10 (start-time)	–	Unsigned 16bit	Higher Lower h:00H to 23H, m:00H to 59H	R/W
DT00045	Calendar (min. / sec.)	–	Unsigned 16bit	Higher Lower m:00H to 59H, s:00H to 59H	R/W
DT00046	Calendar (day / hour)	–	Unsigned 16bit	Higher Lower d:01H to 31H, h:00H to 23H	R/W
DT00047	Calendar (year / month)	–	Unsigned 16bit	Higher Lower y:00H to 99H, m:01H to 12H	R/W
DT00048	Pulse input IN1	–	Unsigned 16bit	1:30Hz, 10:Clock correction	R/W
DT00049	Pulse input IN2	–	Unsigned 16bit	1:30Hz, 2:2kHz	R/W
DT00050	RS485 Device number	–	Unsigned 16bit	Mewtocol: 1 to 99 Modbus: 1 to 247 DL/T645: 0 to 9999	R/W
DT00051	RS485 Transmission speed	–	Unsigned 16bit	0: 1200 1: 2400 2: 4800 3: 9600 4: 19200 5: 38400	R/W
DT00052	RS485 Transmission format	–	Unsigned 16bit	0: 8bit-o 1: 8bit-n 2: 8bit-E	R/W
DT00053	RS485 Stop bit	–	Unsigned 16bit	1, 2	R/W
DT00054	RS485 Response time	1ms	Unsigned 16bit	1 to 99	R/W
DT00055	Phase/Wire	–	Unsigned 16bit	0: 1P2W 1: 1P3W 2: 3P3W 3: 3P4W	R/W
DT00056	CT type (2^{nd})	Rated A (rms)	Unsigned 16bit	1, 5	R/W
DT00057	Primary side current of CT	1A	Unsigned 16bit	1 to 4000	R/W
DT00058	VT ratio	0.01	Unsigned 16bit	100 to 60000	R/W
DT00059	Temperature correction value	0.1℃	Signed 16bit	-100.0 to 100.0	R/W
DT00060	Unit for pulse output OUT1	–	Unsigned 16bit	1:0.0001kWh, 2:0.001kWh, 3:0.01kWh, 4:0.1kWh, 5:1kWh, 6:10kWh, 7:100kWh 100:Stand-by alarm 101:Under voltage alarm 102:Over voltage alarm 103:Power interruption alarm 104:Current alarm 105:Active power alarm 106:Count output 1 107:Count output 2 108:Level output 109:PF alarm 110:current harmonics alarm 111:voltage harmonics alarm 112:current THD alarm 113:voltage THD alarm 114:current unbalancing alarm 115:voltage unbalancing alarm 116:under current alarm 117:reactive power alarm 118:apparent power alarm 119:over frequency alarm 120:under frequency alarm 121:power demand alarm 122:current demand alarm	R/W

Data register	Name	Unit	Kind of data	Range	R/W
DT00061	Unit for pulse output OUT2	—	Unsigned 16bit	1:0.0001kWh, 2:0.001kWh, 3:0.01kWh, 4:0.1kWh, 5:1kWh, 6:10kWh, 7:100kWh 100:Stand-by alarm 101:Under voltage alarm 102:Over voltage alarm 103:power interruption alarm 104:Current alarm 105:Active power alarm 106:Count output 1 107:Count output 2 108:Level output 109:PF alarm) 110:current harmonics alarm 111:voltage harmonics alarm 112:current THD alarm 113:voltage THD alarm 114:current unbalancing alarm 115:voltage unbalancing alarm 116:under current alarm 117:reactive power alarm 118:apparent power alarm 119:over frequency alarm 120:under frequency alarm 121:power demand alarm 122:current demand alarm	R/W
DT00062	Power interruption alarm target phase OUT1	—	Unsigned 16bit	0:All, 1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
DT00063	Power interruption alarm target phase OUT2	—	Unsigned 16bit		R/W
DT00064	Over current (ON threshold)	0.1%	Unsigned 16bit	1 to 1200	R/W
DT00065	Update cycle	100ms	Unsigned 16bit	1 to 10	R/W
DT00066	Prescale IN1	0.001	Unsigned 32bit	1 to 100000	R/W
DT00067					
DT00068	Prescale IN2	0.001	Unsigned 32bit	1 to 100000	R/W
DT00069					
DT00070	Auto-off	1min	Unsigned 16bit	0 to 99 (0: always ON)	R/W
DT00071	Current alarm target Phase OUT1	—	Unsigned 16bit	0:All(except phaseN), 1:Phase1, 2:Phase2, 3:Phase3, 4:phaseN	R/W
DT00072	Current alarm target phase OUT2	—	Unsigned 16bit		R/W
DT00073	Over voltage alarm target phase OUT1 *	—	Unsigned 16bit	0:All 1:Phase1(line1-2) 2:Phase2(line2-3) 3:Phase3(line3-1) 6:All-line 7:Line 1-2 8: Line 2-3 9: Line 3-1	R/W
DT00074	Over voltage alarm target phase OUT2 *	—	Unsigned 16bit		R/W
DT00075	Under voltage alarm target phase OUT1 *	—	Unsigned 16bit		R/W
DT00076	Under voltage alarm target phase OUT2 *	—	Unsigned 16bit		R/W
DT00077	Integral direction OUT1	—	Unsigned 16bit	0:export 1:import	R/W
DT00078	Integral direction OUT2	—	Unsigned 16bit	0:export 1:import	R/W
DT00079	Clock correction	—	Unsigned 16bit	hh:0 to 23 min,:0 to 59	R/W
DT00080	Over voltage (ON threshold)	0.1%	Unsigned 16bit	1000 to 1200	R/W
DT00081	Under voltage (ON threshold)	0.1%	Unsigned 16bit	50 to 1000	R/W
DT00082	Blinking during alarm output	—	Unsigned 16bit	0: no blinking, 1:blinking	R/W

* Select 0,1,2 or 3 for 3P3W and select 6,7,8 or 9 for 3P4W.

Data register	Name	Unit	Kind of data	Range	R/W
DT00083	Conversion rate(-P) T1	0.01	Unsigned 16bit	0 to 9999	R/W
DT00084	Conversion rate(-P) T2	0.01	Unsigned 16bit	0 to 9999	R/W
DT00085	Conversion rate(-P) T3	0.01	Unsigned 16bit	0 to 9999	R/W
DT00086	Conversion rate(-P) T4	0.01	Unsigned 16bit	0 to 9999	R/W
DT00087	Conversion rate (-P)	0.01	Unsigned 16bit	0 to 9999	R/W
DT00088	Rated voltage	1V	Unsigned 16bit	100 to 500	R/W
DT00089	Conversion rate(P) T1	0.01	Unsigned 16bit	0 to 9999	R/W
DT00090	Conversion rate(P) T2	0.01	Unsigned 16bit	0 to 9999	R/W
DT00091	Conversion rate(P) T3	0.01	Unsigned 16bit	0 to 9999	R/W
DT00092	Conversion rate(P) T4	0.01	Unsigned 16bit	0 to 9999	R/W
DT00093	Conversion rate (P)	0.01	Unsigned 16bit	0 to 9999	R/W
DT00094	Password	—	Unsigned 16bit	0 to 9999	R/W
DT00095	Auto display start	1min	Unsigned 16bit	0 to 99 (0: fix display item)	R/W
DT00096	Display cycle	1sec	Unsigned 16bit	1 to 99	R/W
DT00097	Luminance	—	Unsigned 16bit	1 to 5 (dark to light)	R/W
DT00098	Protocol	—	Unsigned 16bit	0: MEWTOCOL 1: MODBUS 2: DL/T645	R/W
DT30000 DT30001	Active power alarm (OFF threshold) OUT1	0.1kW	Unsigned 32bit	0 to 29999999	R/W
DT30002 DT30003	Active power alarm (OFF threshold) OUT2	0.1kW	Unsigned 32bit	0 to 29999999	R/W
DT30004	PF alarm (ON threshold)OUT1	0.001	Unsigned 16bit	0 to 1000	R/W
DT30005	PF alarm (OFF threshold)OUT1	0.001	Unsigned 16bit	0 to 1000	R/W
DT30006	PF alarm(phase) OUT1	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30007	PF alarm (ON threshold)OUT2	0.001	Unsigned 16bit	0 to 1000	R/W
DT30008	PF alarm (OFF threshold)OUT2	0.001	Unsigned 16bit	0 to 1000	R/W
DT30009	PF alarm(phase) OUT2	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30010	Current harmonics alarm(ON threshold) OUT1	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30011	Current harmonics alarm(OFF threshold) OUT1	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30012	Current harmonics alarm(phase) OUT1	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30013	Current harmonics alarm(ON threshold) OUT2	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30014	Current harmonics alarm(OFF threshold) OUT2	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30015	Current harmonics alarm(phase) OUT2	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30016	Voltage harmonics alarm(ON threshold) OUT1	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30017	Voltage harmonics alarm(OFF threshold) OUT1	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30018	Voltage harmonics alarm(phase) OUT1 *	—	Unsigned 16bit	0:All,1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1) 6:All-line 7:Line 1-2 8: Line 2-3 9: Line 3-1	R/W
DT30019	Voltage harmonics alarm(ON threshold) OUT2	0.01%	Unsigned 16bit	0 to 40000	R/W

Data register	Name	Unit	Kind of data	Range	R/W
DT30020	Voltage harmonics alarm(OFF threshold) OUT2	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30021	Voltage harmonics alarm(phase) OUT2 *	—	Unsigned 16bit	0:All,1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1) 6:All-line, 7:Line 1-2, 8: Line 2-3 9: Line 3-1	R/W
DT30022	Current THD alarm (ON threshold) OUT1	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30023	Current THD alarm (OFF threshold) OUT1	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30024	Current THD alarm (phase) OUT1	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30025	Current THD alarm (ON threshold) OUT2	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30026	Current THD alarm (OFF threshold) OUT2	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30027	Current THD alarm (phase) OUT2	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30028	Voltage THD alarm (ON threshold) OUT1	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30029	Voltage THD alarm (OFF threshold) OUT1	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30030	Voltage THD alarm (phase) OUT1 *	—	Unsigned 16bit	0:All,1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1) 6:All-line, 7:Line 1-2, 8: Line 2-3 9: Line 3-1	R/W
DT30031	Voltage THD alarm (ON threshold) OUT2	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30032	Voltage THD alarm (OFF threshold) OUT2	0.01%	Unsigned 16bit	0 to 40000	R/W
DT30033	Voltage THD alarm (phase) OUT2 *	—	Unsigned 16bit	0:All,1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1) 6:All-line, 7:Line 1-2, 8: Line 2-3 9: Line 3-1	R/W
DT30034	Current unbalancing alarm(ON threshold) OUT1	0.01%	Unsigned 32bit	0 to 99999	R/W
DT30035					
DT30036	Current unbalancing alarm(OFF threshold) OUT1	0.01%	Unsigned 32bit	0 to 99999	R/W
DT30037					
DT30038	Current unbalancing alarm(ON threshold) OUT2	0.01%	Unsigned 32bit	0 to 99999	R/W
DT30039					
DT30040	Current unbalancing alarm(OFF threshold) OUT 2	0.01%	Unsigned 32bit	0 to 99999	R/W
DT30041					
DT30042	Voltage unbalancing alarm(ON threshold) OUT1	0.01%	Unsigned 32bit	0 to 99999	R/W
DT30043					
DT30044	Voltage unbalancing alarm(OFF threshold) OUT1	0.01%	Unsigned 32bit	0 to 99999	R/W
DT30045					
DT30046	Voltage unbalancing alarm(ON threshold) OUT2	0.01%	Unsigned 32bit	0 to 99999	R/W
DT30047					
DT30048	Voltage unbalancing alarm(OFF threshold) OUT2	0.01%	Unsigned 32bit	0 to 99999	R/W
DT30049					
DT30050	Under current alarm (phase) OUT1	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W

* Select 0,1,2 or 3 for 3P3W and select 6,7,8 or 9 for 3P4W.

Data register	Name	Unit	Kind of data	Range	R/W
DT30051	Under current alarm (phase) OUT2	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30052	Over frequency alarm (ON threshold) OUT1	0.01Hz	Unsigned 16bit	0 to 10000	R/W
DT30053	Over frequency alarm (OFF threshold) OUT1	0.01Hz	Unsigned 16bit	0 to 10000	R/W
DT30054	Over frequency alarm (phase)OUT1	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30055	Over frequency alarm (ON threshold) OUT2	0.01Hz	Unsigned 16bit	0 to 10000	R/W
DT30056	Over frequency alarm (OFF threshold) OUT2	0.01Hz	Unsigned 16bit	0 to 10000	R/W
DT30057	Over frequency alarm (phase)OUT2	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30058	Under frequency alarm (ON threshold) OUT1	0.01Hz	Unsigned 16bit	0 to 10000	R/W
DT30059	Under frequency alarm (OFF threshold) OUT1	0.01Hz	Unsigned 16bit	0 to 10000	R/W
DT30060	Under frequency alarm (phase)OUT1	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30061	Under frequency alarm (ON threshold) OUT2	0.01Hz	Unsigned 16bit	0 to 10000	R/W
DT30062	Under frequency alarm (OFF threshold) OUT2	0.01Hz	Unsigned 16bit	0 to 10000	R/W
DT30063	Under frequency alarm (phase)OUT2	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30064 DT30065	Reactive power alarm (ON threshold) OUT1	0.1kvar	Unsigned 32bit	0 to 29999999	R/W
DT30066 DT30067	Reactive power alarm (OFF threshold) OUT1	0.1kvar	Unsigned 32bit	0 to 29999999	R/W
DT30068	Reactive power alarm (phase)OUT1	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3,5:total	R/W
DT30069 DT30070	Reactive power alarm (ON threshold) OUT2	0.1kvar	Unsigned 32bit	0 to 29999999	R/W
DT30071 DT30072	Reactive power alarm (OFF threshold) OUT2	0.1kvar	Unsigned 32bit	0 to 29999999	R/W
DT30073	Reactive power alarm (phase)OUT2	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3,5:total	R/W
DT30074 DT30075	Apparent power alarm (ON threshold) OUT1	0.1kVA	Unsigned 32bit	0 to 29999999	R/W
DT30076 DT30077	Apparent power alarm (OFF threshold) OUT1	0.1kVA	Unsigned 32bit	0 to 29999999	R/W
DT30078	Apparent power alarm (phase)OUT1	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3,5:total	R/W
DT30079 DT30080	Apparent power alarm (ON threshold) OUT2	0.1kVA	Unsigned 32bit	0 to 29999999	R/W
DT30081 DT30082	Apparent power alarm (OFF threshold) OUT2	0.1kVA	Unsigned 32bit	0 to 29999999	R/W
DT30083	Apparent power alarm (phase)OUT2	—	Unsigned 16bit	0:All,1:Phase1, 2:Phase2, 3:Phase3,5:total	R/W
DT30084	Power demand alarm (power type) OUT1	—	Unsigned 16bit	0: active power, 1: reactive power, 2: apparent power, 3: active power(export), 4: reactive power(export)	R/W
DT30085 DT30086	Power demand alarm (ON threshold) OUT1	0.001 kW /kvar/kVA	Unsigned 32bit	0 to 99999999	R/W
DT30087 DT30088	Power demand alarm (OFF threshold) OUT1	0.001 kW /kvar/kVA	Unsigned 32bit	0 to 99999999	R/W
DT30089 DT30090	Power demand alarm (target) OUT1	0.001 kW /kvar/kVA	Unsigned 32bit	0 to 99999999	R/W
DT30091	Power demand alarm (hysteresis) OUT1	1%	Unsigned 16bit	0 to 100%	R/W
DT30092	Power demand alarm start-time OUT1	1min,	Unsigned 16bit	1 to 30	R/W

Data register	Name	Unit	Kind of data	Range	R/W
DT30093	Power demand alarm (power type) OUT2	–	Unsigned 16bit	0: active power, 1: reactive power, 2: apparent power, 3: active power(export), 4: reactive power(export)	R/W
DT30094 DT30095	Power demand alarm (ON threshold) OUT2	0.001 kW /kvar/kVA	Unsigned 32bit	0 to 99999999	R/W
DT30096 DT30097	Power demand alarm (OFF threshold) OUT2	0.001 kW /kvar/kVA	Unsigned 32bit	0 to 99999999	R/W
DT30098 DT30099	Power demand alarm (target) OUT2	0.001 kW /kvar/kVA	Unsigned 32bit	0 to 99999999	R/W
DT30100	Power demand alarm (hysteresis) OUT2	1%	Unsigned 16bit	0 to 100%	R/W
DT30101	Power demand alarm start-time OUT2	1min,	Unsigned 16bit	1 to 30	R/W
DT30102	Current demand alarm (ON threshold) OUT1	0.1%	Unsigned 16bit	0 to 1200	R/W
DT30103	Current demand alarm (OFF threshold)OUT1	0.1%	Unsigned 16bit	0 to 1200	R/W
DT30104	Current demand alarm (phase)OUT1	–	Unsigned 16bit	0:All, 1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30105	Current demand alarm (ON threshold) OUT2	0.1%	Unsigned 16bit	0 to 1200	R/W
DT30106	Current demand alarm (OFF threshold)OUT2	0.1%	Unsigned 16bit	0 to 1200	R/W
DT30107	Current demand alarm (phase)OUT2	–	Unsigned 16bit	0:All, 1:Phase1, 2:Phase2, 3:Phase3	R/W
DT30108	Power demand type	–	Unsigned 16bit	0:peak demand, 1:sliding block, 2:fixed block, 3:30-min demand	R/W
DT30109	Power demand interval1	1min,	Unsigned 16bit	1 to 60	R/W
DT30110	Power demand interval2	1min,	Unsigned 16bit	1 to 60	R/W
DT30111	Current demand interval	1min,	Unsigned 16bit	1 to 60	R/W
DT30112	30-min demand calcuration method	–	Unsigned 16bit	0:addition, 1:average	R/W
DT30113	Power input type	–	Unsigned 16bit	0:CT inpuit 1:pulse input	R/W
DT30114	Pulse type	–	Unsigned 16bit	0:kWh, 1:Pulse	R/W
DT30115 DT30116	Pulse rate (electric power conversion)	0.001kWh	Unsigned 32bit	1 to 100000	R/W
DT30117	Pulse constant value	pulse/kWh	Unsigned 16bit	0:50000, 1:2000	R/W
DT30118	Under current (ON threshold)	0.1%	Unsigned 16bit	0 to 1000	R/W
DT30119	Under current (OFF threshold)	0.1%	Unsigned 16bit	0 to 1000	R/W
DT30300	Reset all integral value	–	Unsigned 16bit	0:No 1:Yes	R/W
DT30301	Reset integral value 1	–	Unsigned 16bit	0:No 1:Yes	R/W
DT30302	Reset integral value 2	–	Unsigned 16bit	0:No 1:Yes	R/W
DT30303	Reset integral value 3	–	Unsigned 16bit	0:No 1:Yes	R/W
DT30304	Reset count value 1	–	Unsigned 16bit	0:No 1:Yes	R/W
DT30305	Reset count value 2	–	Unsigned 16bit	0:No 1:Yes	R/W
DT30306	Reset log data	–	Unsigned 16bit	0:No 1:Yes	R/W
DT30307	Cut off current	0.1%	Unsigned 16bit	1 to 500	R/W

Data register	Name	Unit	Kind of data	Range	R/W
DT00100 DT00101	Integral active power (1)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00102 DT00103	Integral active power (2)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00104 DT00105	Integral active power (3)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00106 DT00107	Total integral active power	0.01kWh	Unsigned 32bit	0 to 2999999997	R
DT00108 DT00109	Integral reactive power (1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00110 DT00111	Integral reactive power (2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00112 DT00113	Integral reactive power (3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00114 DT00115	Total integral reactive power	0.01kvarh	Unsigned 32bit	0 to 2999999997	R
DT00116 DT00117	Integral apparent power (1)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00118 DT00119	Integral apparent power (2)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00120 DT00121	Integral apparent power (3)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00122 DT00123	Total integral apparent power	0.01kVAh	Unsigned 32bit	0 to 2999999997	R
DT00124 DT00125	Integral export active power (1)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00126 DT00127	Integral export active power (2)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00128 DT00129	Integral export active power (3)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00130 DT00131	Total integral export active power	0.01kWh	Unsigned 32bit	0 to 2999999997	R
DT00132 DT00133	Integral export reactive power (1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00134 DT00135	Integral export reactive power (2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00136 DT00137	Integral export reactive power (3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00138 DT00139	Total integral export reactive power	0.01kvarh	Unsigned 32bit	0 to 2999999997	R
DT00140 DT00141	Instantaneous active power (1)	0.01kW	Signed 32bit	-99999999 to 99999999	R
DT00142 DT00143	Instantaneous active power (2)	0.01kW	Signed 32bit	-99999999 to 99999999	R
DT00144 DT00145	Instantaneous active power (3)	0.01kW	Signed 32bit	-99999999 to 99999999	R
DT00146 DT00147	Total instantaneous active power	0.01kW	Signed 32bit	-299999997 to 299999997	R
DT00148 DT00149	Instantaneous reactive power (1)	0.01kvar	Signed 32bit	-99999999 to 99999999	R
DT00150 DT00151	Instantaneous reactive power (2)	0.01kvar	Signed 32bit	-99999999 to 99999999	R
DT00152 DT00153	Instantaneous reactive power (3)	0.01kvar	Signed 32bit	-99999999 to 99999999	R
DT00154 DT00155	Total instantaneous reactive power	0.01kvar	Signed 32bit	-299999997 to 299999997	R
DT00156 DT00157	Instantaneous apparent power (1)	0.01kVA	Unsigned 32bit	0 to 99999999	R
DT00158 DT00159	Instantaneous apparent power (2)	0.01kVA	Unsigned 32bit	0 to 99999999	R
DT00160 DT00161	Instantaneous apparent power (3)	0.01kVA	Unsigned 32bit	0 to 99999999	R
DT00162 DT00163	Total instantaneous apparent power	0.01kVA	Unsigned 32bit	0 to 299999997	R

Data register	Name	Unit	Kind of data	Range	R/W
DT00164 DT00165	Voltage 1	0.1V	Unsigned 32bit	0 to 999999999	R
DT00166 DT00167	Voltage 2	0.1V	Unsigned 32bit	0 to 999999999	R
DT00168 DT00169	Voltage 3	0.1V	Unsigned 32bit	0 to 999999999	R
DT00170 DT00171	Voltage average	0.1V	Unsigned 32bit	0 to 999999999	R
DT00172 DT00173	Line voltage 1-2	0.1V	Unsigned 32bit	0 to 999999999	R
DT00174 DT00175	Line voltage 2-3	0.1V	Unsigned 32bit	0 to 999999999	R
DT00176 DT00177	Line voltage 3-1	0.1V	Unsigned 32bit	0 to 999999999	R
DT00178 DT00179	Line voltage average	0.1V	Unsigned 32bit	0 to 999999999	R
DT00180 DT00181	Current (1)	0.01A	Unsigned 32bit	0 to 999999999	R
DT00182 DT00183	Current (2)	0.01A	Unsigned 32bit	0 to 999999999	R
DT00184 DT00185	Current (3)	0.01A	Unsigned 32bit	0 to 999999999	R
DT00186 DT00187	Current phase N	0.01A	Unsigned 32bit	0 to 999999999	R
DT00188 DT00189	Current average	0.01A	Unsigned 32bit	0 to 999999999	R
DT00190	Frequency (1)	0.1Hz	Unsigned 16bit	0 to 999	R
DT00191	Frequency (2)	0.1Hz	Unsigned 16bit	0 to 999	R
DT00192	Frequency (3)	0.1Hz	Unsigned 16bit	0 to 999	R
DT00193	Frequency average	0.1Hz	Unsigned 16bit	0 to 999	R
DT00194	PF (1)	0.001	Signed 16bit	-1000 to 1000	R
DT00195	PF (2)	0.001	Signed 16bit	-1000 to 1000	R
DT00196	PF (3)	0.001	Signed 16bit	-1000 to 1000	R
DT00197	PF average	0.001	Signed 16bit	-1000 to 1000	R
DT00198 DT00199	Integral active power (1)	0.001 kWh	Unsigned 32bit	0 to 999999999	R/W
DT00200 DT00201	Integral active power (2)	0.001 kWh	Unsigned 32bit	0 to 999999999	R/W
DT00202 DT00203	Integral active power (3)	0.001 kWh	Unsigned 32bit	0 to 999999999	R/W
DT00204 DT00205	Total integral active power	0.001 kWh	Unsigned 32bit	0 to 2999999997	R
DT00206 DT00207	Integral reactive power (1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00208 DT00209	Integral reactive power (2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00210 DT00211	Integral reactive power (3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00212 DT00213	Total integral reactive power	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT00214 DT00215	Integral apparent power (1)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00216 DT00217	Integral apparent power (2)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00218 DT00219	Integral apparent power (3)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00220 DT00221	Total integral apparent power	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT00222 DT00223	Integral export active power (1)	0.001 kWh	Unsigned 32bit	0 to 999999999	R/W
DT00224 DT00225	Integral export active power (2)	0.001 kWh	Unsigned 32bit	0 to 999999999	R/W
DT00226 DT00227	Integral export active power (3)	0.001 kWh	Unsigned 32bit	0 to 999999999	R/W

Data register	Name	Unit	Kind of data	Range	R/W
DT00228 DT00229	Total integral export active power	0.001 kWh	Unsigned 32bit	0 to 2999999997	R
DT00230 DT00231	Integral export reactive power (1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00232 DT00233	Integral export reactive power (2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00234 DT00235	Integral export reactive power (3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00236 DT00237	Total integral export reactive power	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT00238 DT00239	Instantaneous active power (1)	0.001 kW	Signed 32bit	-99999999 to 99999999	R
DT00240 DT00241	Instantaneous active power (2)	0.001 kW	Signed 32bit	-99999999 to 99999999	R
DT00242 DT00243	Instantaneous active power (3)	0.001 kW	Signed 32bit	-99999999 to 99999999	R
DT00244 DT00245	Total instantaneous active power	0.001 kW	Signed 32bit	-299999997 to 299999997	R
DT00246 DT00247	Instantaneous reactive power (1)	0.001 kvar	Signed 32bit	-99999999 to 99999999	R
DT00248 DT00249	Instantaneous reactive power (2)	0.001 kvar	Signed 32bit	-99999999 to 99999999	R
DT00250 DT00251	Instantaneous reactive power (3)	0.001 kvar	Signed 32bit	-99999999 to 99999999	R
DT00252 DT00253	Total instantaneous reactive power	0.001 Kvar	Signed 32bit	-299999997 to 299999997	R
DT00254 DT00255	Instantaneous apparent power (1)	0.001 kVA	Unsigned 32bit	0 to 99999999	R
DT00256 DT00257	Instantaneous apparent power (2)	0.001 kVA	Unsigned 32bit	0 to 99999999	R
DT00258 DT00259	Instantaneous apparent power (3)	0.001 kVA	Unsigned 32bit	0 to 99999999	R
DT00260 DT00261	Total instantaneous apparent power	0.001 kVA	Unsigned 32bit	0 to 299999997	R
DT00262 DT00263	Voltage 1	0.01V	Unsigned 32bit	0 to 999999999	R
DT00264 DT00265	Voltage 2	0.01V	Unsigned 32bit	0 to 999999999	R
DT00266 DT00267	Voltage 3	0.01V	Unsigned 32bit	0 to 999999999	R
DT00268 DT00269	Voltage average	0.01V	Unsigned 32bit	0 to 999999999	R
DT00270 DT00271	Line voltage 1-2	0.01V	Unsigned 32bit	0 to 999999999	R
DT00272 DT00273	Line voltage 2-3	0.01V	Unsigned 32bit	0 to 999999999	R
DT00274 DT00275	Line voltage 3-1	0.01V	Unsigned 32bit	0 to 999999999	R
DT00276 DT00277	Line voltage average	0.01V	Unsigned 32bit	0 to 999999999	R
DT00278 DT00279	Current (1)	0.001A	Unsigned 32bit	0 to 999999999	R
DT00280 DT00281	Current (2)	0.001A	Unsigned 32bit	0 to 999999999	R
DT00282 DT00283	Current (3)	0.001A	Unsigned 32bit	0 to 999999999	R
DT00284 DT00285	Current phase N	0.001A	Unsigned 32bit	0 to 999999999	R
DT00286 DT00287	Current average	0.001A	Unsigned 32bit	0 to 999999999	R
DT00288	Frequency (1)	0.01Hz	Unsigned 16bit	0 to 9999	R
DT00289	Frequency (2)	0.01Hz	Unsigned 16bit	0 to 9999	R
DT00290	Frequency (3)	0.01Hz	Unsigned 16bit	0 to 9999	R
DT00291	Frequency average	0.01Hz	Unsigned 16bit	0 to 9999	R

Data register	Name	Unit	Kind of data	Range	R/W
DT00292 DT00293	Pulse input value IN1	－	Unsigned 32bit	0 to 999999	R/W
DT00294 DT00295	Pulse input value IN2	－	Unsigned 32bit	0 to 999999	R/W
DT00296	Pulse input IN1status	－	Unsigned 16bit	0:OFF, 1:ON	R
DT00297	Pulse input IN2status	－	Unsigned 16bit	0:OFF, 1:ON	R
DT00298	Pulse output OUT1status	－	Unsigned 16bit	0:OFF, 1:ON	R
DT00299	Pulse output OUT2status	－	Unsigned 16bit	0:OFF, 1:ON	R
DT00300 DT00301	Integral active power (pulse conversion value)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT00302 DT00303	Estimated demand	0.001kW	Unsigned 32bit	0 to 99999999	R
DT00304	Demand remaining time	1min,	Unsigned 16bit	0 to 30	R
DT00305 DT00306	Present demand (active power)	0.001kW	Unsigned 32bit	0 to 99999999	R
DT00307 DT00308	Present demand (reactive power)	0.001kvar	Unsigned 32bit	0 to 99999999	R
DT00309 DT00310	Present demand (apparent power)	0.001kVA	Unsigned 32bit	0 to 99999999	R
DT00311 DT00312	Present demand (active power (export))	0.001kW	Unsigned 32bit	0 to 99999999	R
DT00313 DT00314	Present demand (reactive power(export))	0.001kvar	Unsigned 32bit	0 to 99999999	R
DT00315 DT00316	Present demand (current①)	0.001A	Unsigned 32bit	0 to 99999999	R
DT00317 DT00318	Present demand (current②)	0.001A	Unsigned 32bit	0 to 99999999	R
DT00319 DT00320	Present demand (current③)	0.001A	Unsigned 32bit	0 to 99999999	R
DT00324	PF status	-	Unsigned 16bit	0: even 1: Lag 2: Lead	R
DT00325 DT00326	Total integral active power	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT00327 DT00328	Total integral reactive power	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT00329 DT00330	Total integral apparent power	0.01kVAh	Unsigned 32bit	0 to 999999999	R
DT00331 DT00332	Total integral export active power	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT00333 DT00334	Total integral export reactive power	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT00335 DT00336	Total integral active power	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT00337 DT00338	Total integral reactive power	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT00339 DT00340	Total integral apparent power	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT00341 DT00342	Total integral export active power	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT00343 DT00344	Total integral export reactive power	0.001 kvarh	Unsigned 32bit	0 to 999999999	R

Data register	Name	Unit	Kind of data	Range	R/W
DT00418	Temperature	0.1℃	Signed 16bit	-1000 to 1000	R
DT00500 DT00501	Integral active power①(T1)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00502 DT00503	Integral active power②(T1)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00504 DT00505	Integral active power③(T1)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00506 DT00507	Total integral active power(T1)	0.01kWh	Unsigned 32bit	0 to 2999999997	R
DT00508 DT00509	Integral active power①(T2)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00510 DT00511	Integral active power②(T2)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00512 DT00513	Integral active power③(T2)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00514 DT00515	Total integral active power(T2)	0.01kWh	Unsigned 32bit	0 to 2999999997	R
DT00516 DT00517	Integral active power①(T3)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00518 DT00519	Integral active power②(T3)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00520 DT00521	Integral active power③(T3)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00522 DT00523	Totalintegral active power(T3)	0.01kWh	Unsigned 32bit	0 to 2999999997	R
DT00524 DT00525	Integral active power①(T4)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00526 DT00527	Integral active power②(T4)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00528 DT00529	Integral active power③(T4)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00530 DT00531	Total integral active power(T4)	0.01kWh	Unsigned 32bit	0 to 2999999997	R
DT00532 DT00533	Integral reactive power①(T1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00534 DT00535	Integral reactive power②(T1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00536 DT00537	Integral reactive power③(T1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00538 DT00539	Totalintegral reactive power(T1)	0.01kvarh	Unsigned 32bit	0 to 2999999997	R
DT00540 DT00541	Integral reactive power①(T2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00542 DT00543	Integral reactive power②(T2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00544 DT00545	Integral reactive power③(T2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00546 DT00547	Totalintegral reactive power(T2)	0.01kvarh	Unsigned 32bit	0 to 2999999997	R
DT00548 DT00549	Integral reactive power①(T3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00550 DT00551	Integral reactive power②(T3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00552 DT00553	Integral reactive power③(T3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00554 DT00555	Totalintegral reactive power(T3)	0.01kvarh	Unsigned 32bit	0 to 2999999997	R

Data register	Name	Unit	Kind of data	Range	R/W
DT00556 DT00557	Integral reactive power①(T4)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00558 DT00559	Integral reactive power②(T4)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00560 DT00561	Integral reactive power③(T4)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00562 DT00563	Totalintegral reactive power(T4)	0.01kVAh	Unsigned 32bit	0 to 2999999997	R
DT00564 DT00565	Integral apparent power①(T1)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00566 DT00567	Integral apparent power②(T1)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00568 DT00569	Integral apparent power③(T1)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00570 DT00571	Totalintegral apparent power(T1)	0.01kVAh	Unsigned 32bit	0 to 2999999997	R
DT00572 DT00573	Integral apparent power①(T2)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00574 DT00575	Integral apparent power②(T2)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00576 DT00577	Integral apparent power③(T2)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00578 DT00579	Totalintegral apparent power (T2)	0.01kVAh	Unsigned 32bit	0 to 2999999997	R
DT00580 DT00581	Integral apparent power①(T3)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00582 DT00583	Integral apparent power②(T3)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00584 DT00585	Integral apparent power③(T3)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00586 DT00587	Totalintegral apparent power(T3)	0.01kVAh	Unsigned 32bit	0 to 2999999997	R
DT00588 DT00589	Integral apparent power①(T4)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00590 DT00591	Integral apparent power②(T4)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00592 DT00593	Integral apparent power③(T4)	0.01kVAh	Unsigned 32bit	0 to 999999999	R/W
DT00594	Total integral apparent power(T4)	0.01kVAh	Unsigned 32bit	0 to 2999999997	R
DT00596 DT00597	Integral active power (export) ①(T1)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00598 DT00599	Integral active power (export) ②(T1)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00600 DT00601	Integral active power (export) ③(T1)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00602 DT00603	Total Integral active power (export) (T1)	0.01kWh	Unsigned 32bit	0 to 2999999997	R
DT00604 DT00605	Integral active power (export) ①(T2)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00606 DT00607	Integral active power (export) ②(T2)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00608 DT00609	Integral active power (export) ③(T2)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00610 DT00611	Total Integral active power (export) (T2)	0.01kWh	Unsigned 32bit	0 to 2999999997	R

Data register	Name	Unit	Kind of data	Range	R/W
DT00612 DT00613	Integral active power (export) ①(T3)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00614 DT00615	Integral active power (export) ②(T3)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00616 DT00617	Integral active power (export) ③(T3)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00618 DT00619	Total integral active power (export) (T3)	0.01kWh	Unsigned 32bit	0 to 2999999997	R
DT00620 DT00621	Integral active power (export) ①(T4)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00622 DT00623	Integral active power (export) ②(T4)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00624 DT00625	Integral active power (export) ③(T4)	0.01kWh	Unsigned 32bit	0 to 999999999	R/W
DT00626 DT00627	total Integral active power (export) (T4)	0.01kWh	Unsigned 32bit	0 to 2999999997	R
DT00628 DT00629	Integral reactive power (export) ①(T1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00630 DT00631	Integral reactive power (export) ②(T1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00632 DT00633	Integral reactive power (export) ③(T1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00634 DT00635	Total integral reactive power (export) (T1)	0.01kvarh	Unsigned 32bit	0 to 2999999997	R
DT00636 DT00637	Integral reactive power (export) ①(T2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00638 DT00639	Integral reactive power (export) ②(T2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00640 DT00641	Integral reactive power (export) ③(T2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00642 DT00643	Total integral reactive power (export) (T2)	0.01kvarh	Unsigned 32bit	0 to 2999999997	R
DT00644 DT00645	Integral reactive power (export) ①(T3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00646 DT00647	Integral reactive power (export) ②(T3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00648 DT00649	Integral reactive power (export) ③(T3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00650 DT00651	Total integral reactive power (export) (T3)	0.01kvarh	Unsigned 32bit	0 to 2999999997	R
DT00652 DT00653	Integral reactive power (export) ①(T4)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00654 DT00655	Integral reactive power (export) ②(T4)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00656 DT00657	Integral reactive power (export) ③(T4)	0.01kvarh	Unsigned 32bit	0 to 999999999	R/W
DT00658 DT00659	TotalIntegral reactive power (export) (T4)	0.01kvarh	Unsigned 32bit	0 to 2999999997	R

Data register	Name	Unit	Kind of data	Range	R/W
DT00660 DT00661	Voltage unbalancing	0.001%	Unsigned 32bit	0 to 999999	R
DT00662 DT00663	Current unbalancing	0.001%	Unsigned 32bit	0 to 999999	R
DT00664 DT00665	Phase voltage THD①	0.001%	Signed 32bit	-400000 to 400000	R
DT00666 DT00667	Phase voltage THD②	0.001%	Signed 32bit	-400000 to 400000	R
DT00668 DT00669	Phase voltage THD③	0.001%	Signed 32bit	-400000 to 400000	R
DT00670 DT00671	Phase voltage THD average	0.001%	Signed 32bit	-400000 to 400000	R
DT00672 DT00673	Line voltage THD 1-2	0.001%	Signed 32bit	-400000 to 400000	R
DT00674 DT00675	Line voltage THD 2-3	0.001%	Signed 32bit	-400000 to 400000	R
DT00676 DT00677	Line voltage THD 3-1	0.001%	Signed 32bit	-400000 to 400000	R
DT00678 DT00679	Line voltage THD average	0.001%	Signed 32bit	-400000 to 400000	R
DT00680 DT00681	Current THD①	0.001%	Signed 32bit	-400000 to 400000	R
DT00682 DT00683	Current THD②	0.001%	Signed 32bit	-400000 to 400000	R
DT00684 DT00685	Current THD③	0.001%	Signed 32bit	-400000 to 400000	R
DT00686 DT00687	Current THD average	0.001%	Signed 32bit	-400000 to 400000	R
DT00688 + 8*(n-2) DT00688 + 8*(n-2) + 1	Phase voltage n-order harmonics①	0.001%	Signed 32bit	-400000 to 400000	R
DT00688 + 8*(n-2) + 2 DT00688 + 8*(n-2) + 3	Phase voltage n-order harmonics②	0.001%	Signed 32bit	-400000 to 400000	R
DT00688 + 8*(n-2) + 4 DT00688 + 8*(n-2) + 5	Phase voltage n-order harmonics③	0.001%	Signed 32bit	-400000 to 400000	R
DT00688 + 8*(n-2) + 6 DT00688 + 8*(n-2) + 7	Phase voltage n-order harmonics average	0.001%	Signed 32bit	-400000 to 400000	R
DT00936 + 8*(n-2) DT00936 + 8*(n-2) + 1	Line voltage n-order harmonics1-2	0.001%	Signed 32bit	-400000 to 400000	R
DT00936 + 8*(n-2) + 2 DT00936 + 8*(n-2) + 3	Line voltage n-order harmonics 2-3	0.001%	Signed 32bit	-400000 to 400000	R

* 'Range' is not the measurement range, it shows the data range.
* n shows 2 to 31.

Data register	Name	Unit	Kind of data	Range	R/W
DT00936 + 8*(n-2) + 4 DT00936 + 8*(n-2) + 5	Line voltage n-order harmonics 3-1	0.001%	Signed 32bit	-400000 to 400000	R
DT00936 + 8*(n-2) + 6 DT00936 + 8*(n-2) + 7	Line voltage n-order harmonics average	0.001%	Signed 32bit	-400000 to 400000	R
DT(001184 + 8*(n-2)) DT001184 + 8*(n-2) + 1	Current n-order harmonics ①	0.001%	Signed 32bit	-400000 to 400000	R
DT001184 + 8*(n-2) + 2 DT001184 + 8*(n-2) + 3	Current n-order harmonics ②	0.001%	Signed 32bit	-400000 to 400000	R
DT001184 + 8*(n-2) + 4 DT001184 + 8*(n-2) + 5	Current n-order harmonics ③	0.001%	Signed 32bit	-400000 to 400000	R
DT001184 + 8*(n-2) + 6 DT001184 + 8*(n-2) + 7	Current n-order harmonics average	0.001%	Signed 32bit	-400000 to 400000	R
DT01424 DT01425	Integral active power①(T1)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01426 DT01427	Integral active power②(T1)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01428 DT01429	Integral active power③(T1)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01430 DT01431	Totalintegral active power(T1)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT01432 DT01433	Integral active power①(T2)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01434 DT01435	Integral active power②(T2)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01436 DT01437	Integral active power③(T2)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01438 DT01439	Total integral active power(T2)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT01440 DT01441	Integral active power①(T3)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01442 DT01443	Integral active power②(T3)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01444 DT01445	Integral active power③(T3)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01446 DT01447	Total integral active power(T3)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT01448 DT01449	Integral active power①(T4)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01450 DT01451	Integral active power②(T4)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01452 DT01453	Integral active power③(T4)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01454 DT01455	Totalintegral active power(T4)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT01456 DT01457	Integral reactive power①(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01458 DT01459	Integral reactive power②(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W

* n shows 2 to 31.

Data register	Name	Unit	Kind of data	Range	R/W
DT01460 DT01461	Integral reactive power③(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01462 DT01463	Totalintegral reactive power(T1)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT01464 DT01465	Integral reactive power①(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01466 DT01467	Integral reactive power②(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01468 DT01469	Integral reactive power③(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01470 DT01471	Totalintegral reactive power(T2)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT01472 DT01473	Integral reactive power①(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01474 DT01475	Integral reactive power②(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01476 DT01477	Integral reactive power③(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01478 DT01479	Totalintegral reactive power(T3)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT01480 DT01481	Integral reactive power①(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01482 DT01483	Integral reactive power②(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01484 DT01485	Integral reactive power③(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01486 DT01487	Totalintegral reactive power(T4)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT01488 DT01489	Integral apparent power①(T1)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01490 DT01491	Integral apparent power②(T1)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01492 DT01493	Integral apparent power③(T1)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01494 DT01495	Totalintegral apparent power(T1)	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT01496 DT01497	Integral apparent power①(T2)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01498 DT01499	Integral apparent power②(T2)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01500 DT01501	Integral apparent power③(T2)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01502 DT01503	Total integral apparent power(T2)	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT01504 DT01505	Integral apparent power①(T3)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01506 DT01507	Integral apparent power②(T3)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01508 DT01509	Integral apparent power③(T3)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01510 DT01511	Totalintegral apparent power(T3)	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT01512 DT01513	Integral apparent power①(T4)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01514 DT01515	Integral apparent power②(T4)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W
DT01516 DT01517	Integral apparent power③(T4)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R/W

Data register	Name	Unit	Kind of data	Range	R/W
DT01518 DT01519	Total integral apparent power(T4)	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT01520 DT01521	Integral active power (export) ①(T1)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01522 DT01523	Integral active power (export) ②(T1)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01524 DT01525	Integral active power (export) ③(T1)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01526 DT01527	Total integral active power (export) (T1)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT01528 DT01529	Integral active power (export) ①(T2)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01530 DT01531	Integral active power (export) ②(T2)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01532 DT01533	Integral active power (export) ③(T2)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01534 DT01535	Total integral active power (export) (T2)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT01536 DT01537	Integral active power (export) ①(T3)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01538 DT01539	Integral active power (export) ②(T3)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01540 DT01541	Integral active power (export) ③(T3)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01542 DT01543	Total integral active power (export) (T3)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT01544 DT01545	Integral active power (export) ①(T4)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01546 DT01547	Integral active power (export) ②(T4)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01548 DT01549	Integral active power (export) ③(T4)	0.001kWh	Unsigned 32bit	0 to 999999999	R/W
DT01550 DT01551	Total integral active power (export) (T4)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT01552 DT01553	Integral reactive power (export) ①(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01554 DT01555	Integral reactive power (export) ②(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01556 DT01557	Integral reactive power (export) ③(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01558 DT01559	Total integral reactive power (export) (T1)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT01560 DT01561	Integral reactive power (export) ①(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01562 DT01563	Integral reactive power (export) ②(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01564 DT01565	Integral reactive power (export) ③(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01566 DT01567	Total integral reactive power (export) (T2)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT01568 DT01569	Integral reactive power (export) ①(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01570 DT01571	Integral reactive power (export) ②(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01572 DT01573	Integral reactive power (export) ③(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01574 DT01575	Total integral reactive power (export) (T3)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R

Data register	Name	Unit	Kind of data	Range	R/W
DT01576 DT01577	Integral reactive power (export) ①(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01578 DT01579	Integral reactive power (export) ②(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01580 DT01581	Integral reactive power (export) ③(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R/W
DT01582 DT01583	Total Integral reactive power (export) (T4)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT01600 DT01601	Total integral active power(T1)	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT01602 DT01603	Total integral active power(T2)	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT01604 DT01605	Total integral active power(T3)	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT01606 DT01607	Total integral active power(T4)	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT01608 DT01609	Totalintegral reactive power(T1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT01610 DT01611	Totalintegral reactive power(T2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT01612 DT01613	Totalintegral reactive power(T3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT01614 DT01615	Totalintegral reactive power(T4)	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT01616 DT01617	Totalintegral apparent power(T1)	0.01kVAh	Unsigned 32bit	0 to 999999999	R
DT01618 DT01619	Totalintegral apparent power(T2)	0.01kVAh	Unsigned 32bit	0 to 999999999	R
DT01620 DT01621	Totalintegral apparent power(T3)	0.01kVAh	Unsigned 32bit	0 to 999999999	R
DT01622 DT01623	Totalintegral apparent power(T4)	0.01kVAh	Unsigned 32bit	0 to 999999999	R
DT01624 DT01625	Total integral active power (export) (T1)	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT01626 DT01627	Total integral active power (export) (T2)	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT01628 DT01629	Total integral active power (export) (T3)	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT01630 DT01631	Total integral active power (export) (T4)	0.01kWh	Unsigned 32bit	0 to 999999999	R
DT01632 DT01633	Total integral reactive power (export) (T1)	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT01634 DT01635	Total integral reactive power (export) (T2)	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT01636 DT01637	Total integral reactive power (export) (T3)	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT01638 DT01639	Total integral reactive power (export) (T4)	0.01kvarh	Unsigned 32bit	0 to 999999999	R
DT01640 DT01641	Total integral active power(T1)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT01642 DT01643	Total integral active power(T2)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT01644 DT01645	Total integral active power(T3)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT01646 DT01647	Total integral active power(T4)	0.001 kWh	Unsigned 32bit	0 to 999999999	R

Data register	Name	Unit	Kind of data	Range	R/W
DT01648 DT01649	Totalintegral reactive power(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT01650 DT01651	Totalintegral reactive power(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT01652 DT01653	Totalintegral reactive power(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT01654 DT01655	Totalintegral reactive power(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT01656 DT01657	Totalintegral apparent power(T1)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT01658 DT01659	Totalintegral apparent power(T2)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT01660 DT01661	Totalintegral apparent power(T3)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT01662 DT01663	Totalintegral apparent power(T4)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT01664 DT01665	Total integral active power (export) (T1)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT01666 DT01667	Total integral active power (export) (T2)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT01668 DT01669	Total integral active power (export) (T3)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT01670 DT01671	Total integral active power (export) (T4)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT01672 DT01673	Total integral reactive power (export) (T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT01674 DT01675	Total integral reactive power (export) (T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT01676 DT01677	Total integral reactive power (export) (T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT01678 DT01679	Total integral reactive power (export) (T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT05008 DT05009	Export power conversion value ①(T1)	0.01	Unsigned 32bit	0 to 999999999	R
DT05010 DT05011	Export power conversion value ②(T1)	0.01	Unsigned 32bit	0 to 999999999	R
DT05012 DT05013	Export power conversion value ③(T1)	0.01	Unsigned 32bit	0 to 999999999	R
DT05014 DT05015	Total Export power conversion value (T1)	0.01	Unsigned 32bit	0 to 2999999997	R
DT05016 DT05017	Export power conversion value ①(T2)	0.01	Unsigned 32bit	0 to 999999999	R
DT05018 DT05019	Export power conversion value ②(T2)	0.01	Unsigned 32bit	0 to 999999999	R
DT05020 DT05021	Export power conversion value ③(T2)	0.01	Unsigned 32bit	0 to 999999999	R
DT05022 DT05023	Total export power conversion value (T2)	0.01	Unsigned 32bit	0 to 2999999997	R

Data register	Name	Unit	Kind of data	Range	R/W
DT05024 DT05025	Export power conversion value ①(T3)	0.01	Unsigned 32bit	0 to 999999999	R
DT05026 DT05027	Export power conversion value ②(T3)	0.01	Unsigned 32bit	0 to 999999999	R
DT05028 DT05029	Export power conversion value ③(T3)	0.01	Unsigned 32bit	0 to 999999999	R
DT05030 DT05031	TotalExport power conversion value (T3)	0.01	Unsigned 32bit	0 to 2999999997	R
DT05032 DT05033	Export power conversion value ①(T4)	0.01	Unsigned 32bit	0 to 999999999	R
DT05034 DT05035	Export power conversion value ②(T4)	0.01	Unsigned 32bit	0 to 999999999	R
DT05036 DT05037	Export power conversion value ③(T4)	0.01	Unsigned 32bit	0 to 999999999	R
DT05038 DT05039	TotalExport power conversion value (T4)	0.01	Unsigned 32bit	0 to 2999999997	R
DT05040 DT05041	Export power conversion value (1)	0.01	Unsigned 32bit	0 to 999999999	R
DT05042 DT05043	Export power conversion value (2)	0.01	Unsigned 32bit	0 to 999999999	R
DT05044 DT05045	Export power conversion value (3)	0.01	Unsigned 32bit	0 to 999999999	R
DT05046 DT05047	Total export power conversion value	0.01	Unsigned 32bit	0 to 2999999997	R
DT05058 DT05059	Import power conversion value ①(T1)	0.01	Unsigned 32bit	0 to 999999999	R
DT05060 DT05061	Import power conversion value ②(T1)	0.01	Unsigned 32bit	0 to 999999999	R
DT05062 DT05063	Import power conversion value ③(T1)	0.01	Unsigned 32bit	0 to 999999999	R
DT05064 DT05065	TotalImport power conversion value (T1)	0.01	Unsigned 32bit	0 to 2999999997	R

Data register	Name	Unit	Kind of data	Range	R/W
DT05066 DT05067	Import power conversion value ①(T2)	0.01	Unsigned 32bit	0 to 999999999	R
DT05068 DT05069	Import power conversion value ②(T2)	0.01	Unsigned 32bit	0 to 999999999	R
DT05070 DT05071	Import power conversion value ③(T2)	0.01	Unsigned 32bit	0 to 999999999	R
DT05072 DT05073	TotalImport power conversion value (T2)	0.01	Unsigned 32bit	0 to 2999999997	R
DT05074 DT05075	Import power conversion value ①(T3)	0.01	Unsigned 32bit	0 to 999999999	R
DT05076 DT05077	Import power conversion value ②(T3)	0.01	Unsigned 32bit	0 to 999999999	R
DT05078 DT05079	Import power conversion value ③(T3)	0.01	Unsigned 32bit	0 to 999999999	R
DT05080 DT05081	TotalImport power conversion value (T3)	0.01	Unsigned 32bit	0 to 2999999997	R
DT05082 DT05083	Import power conversion value ①(T4)	0.01	Unsigned 32bit	0 to 999999999	R
DT05084 DT05085	Import power conversion value ②(T4)	0.01	Unsigned 32bit	0 to 999999999	R
DT05086 DT05087	Import power conversion value ③(T4)	0.01	Unsigned 32bit	0 to 999999999	R
DT05088 DT05089	TotalImport power conversion value (T4)	0.01	Unsigned 32bit	0 to 2999999997	R
DT05090 DT05091	Conversion value (1)	0.01	Unsigned 32bit	0 to 999999999	R
DT05092 DT05093	Conversion value (2)	0.01	Unsigned 32bit	0 to 999999999	R
DT05094 DT05095	Conversion value (3)	0.01	Unsigned 32bit	0 to 999999999	R
DT05096 DT05097	Total conversion value	0.01	Unsigned 32bit	0 to 2999999997	R
DT10000+ 25*(MM-1)	Monthly max. demand date active power(T1)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, min,:01H to 12H	R
DT10000+ 25*(MM-1)+1	Monthly max. demand time active power(T1)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10000+ 25*(MM-1)+2	Monthly max. demand time active power(T1)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10000+ 25*(MM-1)+3 DT10000+ 25*(MM-1)+4	Monthly max.demand active power(T1)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10005+ 25*(MM-1)	Monthly max. demand date active power(T2)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, min,:01H to 12H	R
DT10005+ 25*(MM-1)+1	Monthly max. demand time active power(T2)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10005+ 25*(MM-1)+2	Monthly max. demand time active power(T2)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10005+ 25*(MM-1)+3 DT10005+ 25*(MM-1)+4	Monthly max. demand active power(T2)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10010+ 25*(MM-1)	Monthly max. demand date active power(T3)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, min,:01H to 12H	R
DT10010+ 25*(MM-1)+1	Monthly max. demand time active power(T3)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10010+ 25*(MM-1)+2	Monthly max. demand time active power(T3)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT10010+ 25*(MM-1)+3	Monthly max. demand active power(T3)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10010+ 25*(MM-1)+4					
DT10015+ 25*(MM-1)	Monthly max. demand date active power(T4)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, min,:01H to 12H	R
DT10015+ 25*(MM-1)+1	Monthly max. demand time active power(T4)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10015+ 25*(MM-1)+2	Monthly max. demand time active power(T4)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10015+ 25*(MM-1)+3	Monthly max.demand active power(T4)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10015+ 25*(MM-1)+4					
DT10020+ 25*(MM-1)	Monthly max. demand date active power(T)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10020+ 25*(MM-1)+1	Monthly max. demand time active power(T)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10020+ 25*(MM-1)+2	Monthly max. demand time active power(T)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10020+ 25*(MM-1)+3	Monthly max.demand active power(T)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10020+ 25*(MM-1)+4					
DT10300+ 25*(MM-1)	Monthly max. demand date reactive power(T1)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10300+ 25*(MM-1)+1	Monthly max. demand time reactive power(T1)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10300+ 25*(MM-1)+2	Monthly max. demand time reactive power(T1)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10300+ 25*(MM-1)+3	Monthly max.demand reactive power(T1)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT10300+ 25*(MM-1)+4					
DT10305+ 25*(MM-1)	Monthly max. demand date reactive power(T2)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10305+ 25*(MM-1)+1	Monthly max. demand time reactive power(T2)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10305+ 25*(MM-1)+2	Monthly max. demand time reactive power(T2)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10305+ 25*(MM-1)+3	Monthly max.demand reactive power(T2)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT10305+ 25*(MM-1)+4					
DT10310+ 25*(MM-1)	Monthly max. demand date reactive power(T3)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10310+ 25*(MM-1)+1	Monthly max. demand time reactive power(T3)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10310+ 25*(MM-1)+2	Monthly max. demand time reactive power(T3)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10310+ 25*(MM-1)+3	Monthly max.demand reactive power(T3)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT10310+ 25*(MM-1)+4					

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Data register	Name	Unit	Kind of data	Range	R/W
DT10315+ 25*(MM-1)	Monthly max. demand date reactive power(T4)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10315+ 25*(MM-1)+1	Monthly max. demand time reactive power(T4)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10315+ 25*(MM-1)+2	Monthly max. demand time reactive power(T4)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10315+ 25*(MM-1)+3	Monthly max.demand reactive power(T4)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT10315+ 25*(MM-1)+4					
DT10320+ 25*(MM-1)	Monthly max. demand date reactive power(T)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10320+ 25*(MM-1)+1	Monthly max. demand time reactive power(T)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10320+ 25*(MM-1)+2	Monthly max. demand time reactive power(T)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10320+ 25*(MM-1)+3	Monthly max.demand reactive power(T)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT10320+ 25*(MM-1)+4					
DT10600+ 25*(MM-1)	Monthly max. demand date apparent power(T1)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10600+ 25*(MM-1)+1	Monthly max. demand time apparent power(T1)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10600+ 25*(MM-1)+2	Monthly max. demand time apparent power(T1)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10600+ 25*(MM-1)+3	Monthly max.demand apparent power(T1)	0.001kVA	Unsigned 32bit	0 to 2999999997	R
DT10600+ 25*(MM-1)+4					
DT10605+ 25*(MM-1)	Monthly max. demand date apparent power(T2)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10605+ 25*(MM-1)+1	Monthly max. demand time apparent power(T2)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10605+ 25*(MM-1)+2	Monthly max. demand time apparent power(T2)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10605+ 25*(MM-1)+3	Monthly max.demand apparent power(T2)	0.001kVA	Unsigned 32bit	0 to 2999999997	R
DT10605+ 25*(MM-1)+4					
DT10610+ 25*(MM-1)	Monthly max. demand date apparent power(T3)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10610+ 25*(MM-1)+1	Monthly max. demand time apparent power(T3)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10610+ 25*(MM-1)+2	Monthly max. demand time apparent power(T3)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10610+ 25*(MM-1)+3	Monthly max.demand apparent power(T3)	0.001kVA	Unsigned 32bit	0 to 2999999997	R
DT10610+ 25*(MM-1)+4					

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Data register	Name	Unit	Kind of data	Range	R/W
DT10615+ 25*(MM-1)	Monthly max. demand date apparent power(T4)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10615+ 25*(MM-1)+1	Monthly max. demand time apparent power(T4)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10615+ 25*(MM-1)+2	Monthly max. demand time apparent power(T4)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10615+ 25*(MM-1)+3	Monthly max.demand apparent power(T4)	0.001kVA	Unsigned 32bit	0 to 2999999997	R
DT10615+ 25*(MM-1)+4					
DT10620+ 25*(MM-1)	Monthly max. demand date apparent power(T)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10620+ 25*(MM-1)+1	Monthly max. demand time apparent power(T)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10620+ 25*(MM-1)+2	Monthly max. demand time apparent power(T)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10620+ 25*(MM-1)+3	Monthly max.demand apparent power(T)	0.001kVA	Unsigned 32bit	0 to 2999999997	R
DT10620+ 25*(MM-1)+4					
DT10900+ 25*(MM-1)	Monthly max. demand date active power (export) (T1)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10900+ 25*(MM-1)+1	Monthly max. demand time active power (export) (T1)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10900+ 25*(MM-1)+2	Monthly max. demand time active power (export) (T1)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10900+ 25*(MM-1)+3	Monthly max.demand active power (export) (T1)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10900+ 25*(MM-1)+4					
DT10905+ 25*(MM-1)	Monthly max. demand date active power (export) (T2)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10905+ 25*(MM-1)+1	Monthly max. demand time active power (export) (T2)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10905+ 25*(MM-1)+2	Monthly max. demand time active power (export) (T2)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10905+ 25*(MM-1)+3	Monthly max.demand active power (export) (T2)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10905+ 25*(MM-1)+4					
DT10910+ 25*(MM-1)	Monthly max. demand date active power (export) (T3)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10910+ 25*(MM-1)+1	Monthly max. demand time active power (export) (T3)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10910+ 25*(MM-1)+2	Monthly max. demand time active power (export) (T3)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10910+ 25*(MM-1)+3	Monthly max.demand active power (export) (T3)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10910+ 25*(MM-1)+4					

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Data register	Name	Unit	Kind of data	Range	R/W
DT10915+ 25*(MM-1)	Monthly max. demand date active power (export) (T4)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10915+ 25*(MM-1)+1	Monthly max. demand time active power (export) (T4)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10915+ 25*(MM-1)+2	Monthly max. demand time active power (export) (T4)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10915+ 25*(MM-1)+3	Monthly max.demand active power (export) (T4)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10915+ 25*(MM-1)+4					
DT10920+ 25*(MM-1)	Monthly max. demand date active power (export) (T)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT10920+ 25*(MM-1)+1	Monthly max. demand time active power (export) (T)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT10920+ 25*(MM-1)+2	Monthly max. demand time active power (export) (T)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT10920+ 25*(MM-1)+3	Monthly max.demand active power (export) (T)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT10920+ 25*(MM-1)+4					
DT11200+ 25*(MM-1)	Monthly max. demand date reactive power (export) (T1)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11200+ 25*(MM-1)+1	Monthly max. demand time reactive power (export) (T1)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11200+ 25*(MM-1)+2	Monthly max. demand time reactive power (export) (T1)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11200+ 25*(MM-1)+3	Monthly max.demand reactive power (export) (T1)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT11200+ 25*(MM-1)+4					
DT11205+ 25*(MM-1)	Monthly max. demand date reactive power (export) (T2)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11205+ 25*(MM-1)+1	Monthly max. demand time reactive power (export) (T2)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11205+ 25*(MM-1)+2	Monthly max. demand time reactive power (export) (T2)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11205+ 25*(MM-1)+3	Monthly max.demand reactive power (export) (T2)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT11205+ 25*(MM-1)+4					
DT11210+ 25*(MM-1)	Monthly max. demand date reactive power (export) (T3)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11210+ 25*(MM-1)+1	Monthly max. demand time reactive power (export) (T3)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11210+ 25*(MM-1)+2	Monthly max. demand time reactive power (export) (T3)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11210+ 25*(MM-1)+3	Monthly max.demand reactive power (export) (T3)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT11210+ 25*(MM-1)+4					
DT11215+ 25*(MM-1)	Monthly max. demand date reactive power (export) (T4)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11215+ 25*(MM-1)+1	Monthly max. demand time reactive power (export) (T4)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11215+ 25*(MM-1)+2	Monthly max. demand time reactive power (export) (T4)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11215+ 25*(MM-1)+3	Monthly max.demand reactive power (export) (T4)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT11215+ 25*(MM-1)+4					

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Data register	Name	Unit	Kind of data	Range	R/W
DT11220+ 25*(MM-1)	Monthly max. demand date reactive power (export) (T)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11220+ 25*(MM-1)+1	Monthly max. demand time reactive power (export) (T)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11220+ 25*(MM-1)+2	Monthly max. demand time reactive power (export) (T)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11220+ 25*(MM-1)+3 DT11220+ 25*(MM-1)+4	Monthly max.demand reactive power (export) (T)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT11500+ 40*(MM-1)	Monthly max. date instantaneous active power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11500+ 40*(MM-1)+1	Monthly max. time instantaneous active power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11500+ 40*(MM-1)+2	Monthly max. time instantaneous active power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11500+ 40*(MM-1)+3 DT11500+ 40*(MM-1)+4	Monthly max. instantaneous active power①	0.001kW	Unsigned 32bit	0 to 999999999	R
DT11505+ 40*(MM-1)	Monthly max. date instantaneous active power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11505+ 40*(MM-1)+1	Monthly max. time instantaneous active power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11505+ 40*(MM-1)+2	Monthly max. time instantaneous active power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11505+ 40*(MM-1)+3 DT11505+ 40*(MM-1)+4	Monthly max. instantaneous active power②	0.001kW	Unsigned 32bit	0 to 999999999	R
DT11510+ 40*(MM-1)	Monthly max. date instantaneous active power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11510+ 40*(MM-1)+1	Monthly max. time instantaneous active power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11510+ 40*(MM-1)+2	Monthly max. time instantaneous active power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11510+ 40*(MM-1)+3 DT11510+ 40*(MM-1)+4	Monthly max. instantaneous active power③	0.001kW	Unsigned 32bit	0 to 999999999	R
DT11515+ 40*(MM-1)	Monthly max. date Total instantaneous active power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11515+ 40*(MM-1)+1	Monthly max. time Total instantaneous active power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11515+ 40*(MM-1)+2	Monthlymax. time Total instantaneous active power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11515+ 40*(MM-1)+3 DT11515+ 40*(MM-1)+4	Monthly max. total instantaneous active power	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT11520+ 40*(MM-1)	Monthly min. date instantaneous active power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11520+ 40*(MM-1)+1	Monthly min. time instantaneous active power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11520+ 40*(MM-1)+2	Monthly min. time instantaneous active power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11520+ 40*(MM-1)+3 DT11520+ 40*(MM-1)+4	Monthly min. instantaneous active power①	0.001kW	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT11525+ 40*(MM-1)	Monthly min. date instantaneous active power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11525+ 40*(MM-1)+1	Monthly min. time instantaneous active power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11525+ 40*(MM-1)+2	Monthly min. time instantaneous active power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11525+ 40*(MM-1)+3 DT11525+ 40*(MM-1)+4	Monthly min. instantaneous active power②	0.001kW	Unsigned 32bit	0 to 999999999	R
DT11530+ 40*(MM-1)	Monthly min. date instantaneous active power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11530+ 40*(MM-1)+1	Monthly min. time instantaneous active power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11530+ 40*(MM-1)+2	Monthly min. time instantaneous active power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11530+ 40*(MM-1)+3 DT11530+ 40*(MM-1)+4	Monthly min. instantaneous active power③	0.001kW	Unsigned 32bit	0 to 999999999	R
DT11535+ 40*(MM-1)	Monthly min. date total instantaneous active power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11535+ 40*(MM-1)+1	Monthly min. time total instantaneous active power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11535+ 40*(MM-1)+2	Monthly min. time total instantaneous active power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11535+ 40*(MM-1)+3 DT11535+ 40*(MM-1)+4	Monthly min. total instantaneous active power	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT11980+ 40*(MM-1)	Monthly max. date reactive power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11980+ 40*(MM-1)+1	Monthly max. time reactive power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11980+ 40*(MM-1)+2	Monthly max. time reactive power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11980+ 40*(MM-1)+3 DT11980+ 40*(MM-1)+4	Monthly max. reactive power①	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT11985+ 40*(MM-1)	Monthly max. date reactive power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11985+ 40*(MM-1)+1	Monthly max. time reactive power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11985+ 40*(MM-1)+2	Monthly max. time reactive power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11985+ 40*(MM-1)+3 DT11985+ 40*(MM-1)+4	Monthly max. reactive power②	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT11990+ 40*(MM-1)	Monthly max. date reactive power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11990+ 40*(MM-1)+1	Monthly max. time reactive power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11990+ 40*(MM-1)+2	Monthly max. time reactive power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11990+ 40*(MM-1)+3 DT11990+ 40*(MM-1)+4	Monthly max. reactive power③	0.001kvar	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT11995+ 40*(MM-1)	Monthly max. date Total reactive power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT11995+ 40*(MM-1)+1	Monthly max. time total reactive power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT11995+ 40*(MM-1)+2	Monthly max. time total reactive power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT11995+ 40*(MM-1)+3 / DT11995+ 40*(MM-1)+4	Monthly max. total reactive power	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT12000+ 40*(MM-1)	Monthly min. date reactive power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12000+ 40*(MM-1)+1	Monthly min. time reactive power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12000+ 40*(MM-1)+2	Monthly min. time reactive power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12000+ 40*(MM-1)+3 / DT12000+ 40*(MM-1)+4	Monthly min. reactive power①	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT12005+ 40*(MM-1)	Monthly min. date reactive power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12005+ 40*(MM-1)+1	Monthly min. time reactive power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12005+ 40*(MM-1)+2	Monthly min. time reactive power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12005+ 40*(MM-1)+3 / DT12005+ 40*(MM-1)+4	Monthly min. reactive power②	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT12010+ 40*(MM-1)	Monthly min. date reactive power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12010+ 40*(MM-1)+1	Monthly min. time reactive power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12010+ 40*(MM-1)+2	Monthly min. time reactive power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12010+ 40*(MM-1)+3 / DT12010+ 40*(MM-1)+4	Monthly min. reactive power③	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT12015+ 40*(MM-1)	Monthly min. date total reactive power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12015+ 40*(MM-1)+1	Monthly min. time total reactive power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12015+ 40*(MM-1)+2	Monthly min. time total reactive power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12015+ 40*(MM-1)+3 / DT12015+ 40*(MM-1)+4	Monthly min. total reactive power	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT12460+ 40*(MM-1)	Monthly max. date apparent power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12460+ 40*(MM-1)+1	Monthly max. time apparent power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12460+ 40*(MM-1)+2	Monthly max. time apparent power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12460+ 40*(MM-1)+3 / DT12460+ 40*(MM-1)+4	Monthly max. apparent power①	0.001kVA	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT12465+ 40*(MM-1)	Monthly max. date apparent power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12465+ 40*(MM-1)+1	Monthly max. time apparent power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12465+ 40*(MM-1)+2	Monthly max. time apparent power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12465+ 40*(MM-1)+3	Monthly max. apparent power②	0.001kVA	Unsigned 32bit	0 to 999999999	R
DT12465+ 40*(MM-1)+4					
DT12470+ 40*(MM-1)	Monthly max. date apparent power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12470+ 40*(MM-1)+1	Monthly max. time apparent power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12470+ 40*(MM-1)+2	Monthly max. time apparent power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12470+ 40*(MM-1)+3	Monthly max. apparent power③	0.001kVA	Unsigned 32bit	0 to 999999999	R
DT12470+ 40*(MM-1)+4					
DT12475+ 40*(MM-1)	Monthly max. date total apparent power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12475+ 40*(MM-1)+1	Monthly max. time total apparent power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12475+ 40*(MM-1)+2	Monthly max. time total apparent power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12475+ 40*(MM-1)+3	Monthly max. total apparent power	0.001kVA	Unsigned 32bit	0 to 2999999997	R
DT12475+ 40*(MM-1)+4					
DT12480+ 40*(MM-1)	Monthly min. date apparent power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12480+ 40*(MM-1)+1	Monthly min. time apparent power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12480+ 40*(MM-1)+2	Monthly min. time apparent power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12480+ 40*(MM-1)+3	Monthly min. apparent power①	0.001kVA	Unsigned 32bit	0 to 999999999	R
DT12480+ 40*(MM-1)+4					
DT12485+ 40*(MM-1)	Monthly min. date apparent power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12485+ 40*(MM-1)+1	Monthly min. time apparent power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12485+ 40*(MM-1)+2	Monthly min. time apparent power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12485+ 40*(MM-1)+3	Monthly min. apparent power②	0.001kVA	Unsigned 32bit	0 to 999999999	R
DT12485+ 40*(MM-1)+4					
DT12490+ 40*(MM-1)	Monthly min. date apparent power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12490+ 40*(MM-1)+1	Monthly min. time apparent power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12490+ 40*(MM-1)+2	Monthly min. time apparent power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12490+ 40*(MM-1)+3	Monthly min. apparent power③	0.001kVA	Unsigned 32bit	0 to 999999999	R
DT12490+ 40*(MM-1)+4					

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Data register	Name	Unit	Kind of data	Range	R/W
DT12495+ 40*(MM-1)	Monthly min. date total apparent power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12495+ 40*(MM-1)+1	Monthly min. time total apparent power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12495+ 40*(MM-1)+2	Monthly min. time total apparent power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12495+ 40*(MM-1)+3 DT12495+ 40*(MM-1)+4	Monthly min. total apparent power	0.001kVA	Unsigned 32bit	0 to 2999999997	R
DT12940+ 40*(MM-1)	Monthly max. date active power (export) ①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12940+ 40*(MM-1)+1	Monthly max. time active power (export) ①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12940+ 40*(MM-1)+2	Monthly max. time active power (export) ①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12940+ 40*(MM-1)+3 DT12940+ 40*(MM-1)+4	Monthly max. active power (export) ①	0.001kW	Unsigned 32bit	0 to 999999999	R
DT12945+ 40*(MM-1)	Monthly max. date active power (export) ②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12945+ 40*(MM-1)+1	Monthly max. time active power (export) ②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12945+ 40*(MM-1)+2	Monthly max. time active power (export) ②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12945+ 40*(MM-1)+3 DT12945+ 40*(MM-1)+4	Monthly max. active power (export) ②	0.001kW	Unsigned 32bit	0 to 999999999	R
DT12950+ 40*(MM-1)	Monthly max. date active power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12950+ 40*(MM-1)+1	Monthly max. time active power (export) ③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12950+ 40*(MM-1)+2	Monthly max. time active power (export) ③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12950+ 40*(MM-1)+3 DT12950+ 40*(MM-1)+4	Monthly max. active power (export) ③	0.001kW	Unsigned 32bit	0 to 999999999	R
DT12955+ 40*(MM-1)	Monthly max. date totalactive power (export)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12955+ 40*(MM-1)+1	Monthly max. time totalactive power (export)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12955+ 40*(MM-1)+2	Monthly max. time totalactive power (export)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12955+ 40*(MM-1)+3 DT12955+ 40*(MM-1)+4	Monthly max. totalactive power (export)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT12960+ 40*(MM-1)	Monthly min. date active power (export) ①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12960+ 40*(MM-1)+1	Monthly min. time active power (export) ①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12960+ 40*(MM-1)+2	Monthly min. time active power (export) ①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12960+ 40*(MM-1)+3 DT12960+ 40*(MM-1)+4	Monthly min. active power (export) ①	0.001kW	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT12965+ 40*(MM-1)	Monthly min. date active power (export) ②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12965+ 40*(MM-1)+1	Monthly min. time active power (export) ②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12965+ 40*(MM-1)+2	Monthly min. time active power (export) ②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12965+ 40*(MM-1)+3 DT12965+ 40*(MM-1)+4	Monthly min. active power (export) ②	0.001kW	Unsigned 32bit	0 to 999999999	R
DT12970+ 40*(MM-1)	Monthly min. date active power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12970+ 40*(MM-1)+1	Monthly min. time active power (export) ③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12970+ 40*(MM-1)+2	Monthly min. time active power (export) ③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12970+ 40*(MM-1)+3 DT12970+ 40*(MM-1)+4	Monthly min. active power (export) ③	0.001kW	Unsigned 32bit	0 to 999999999	R
DT12975+ 40*(MM-1)	Monthly min. date totalactive power (export)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT12975+ 40*(MM-1)+1	Monthly min. time totalactive power (export)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT12975+ 40*(MM-1)+2	Monthly min. time totalactive power (export)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT12975+ 40*(MM-1)+3 DT12975+ 40*(MM-1)+4	Monthly min. totalactive power (export)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT13420+ 40*(MM-1)	Monthly max. date reactive power (export) ①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13420+ 40*(MM-1)+1	Monthly max. time reactive power (export) ①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13420+ 40*(MM-1)+2	Monthly max. time reactive power (export) ①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13420+ 40*(MM-1)+3 DT13420+ 40*(MM-1)+4	Monthly max. reactive power (export) ①	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT13425+ 40*(MM-1)	Monthly max. date reactive power (export) ②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13425+ 40*(MM-1)+1	Monthly max. time reactive power (export) ②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13425+ 40*(MM-1)+2	Monthly max. time reactive power (export) ②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13425+ 40*(MM-1)+3 DT13425+ 40*(MM-1)+4	Monthly max. reactive power (export) ②	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT13430+ 40*(MM-1)	Monthly max. date reactive power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13430+ 40*(MM-1)+1	Monthly max. time reactive power (export) ③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13430+ 40*(MM-1)+2	Monthly max. time reactive power (export) ③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13430+ 40*(MM-1)+3 DT13430+ 40*(MM-1)+4	Monthly max. reactive power (export) ③	0.001kvar	Unsigned 32bit	0 to 999999999	R

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Data register	Name	Unit	Kind of data	Range	R/W
DT13435+ 40*(MM-1)	Monthly max. date totalreactive power (export)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13435+ 40*(MM-1)+1	Monthly max. time totalreactive power (export)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13435+ 40*(MM-1)+2	Monthly max. time totalreactive power (export)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13435+ 40*(MM-1)+3	Monthly max. totalreactive power (export)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT13435+ 40*(MM-1)+4					
DT13440+ 40*(MM-1)	Monthly min. date reactive power (export) ①	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13440+ 40*(MM-1)+1	Monthly min. time reactive power (export) ①	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13440+ 40*(MM-1)+2	Monthly min. time reactive power (export) ①	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13440+ 40*(MM-1)+3	Monthly min.reactive power (export) ①	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT13440+ 40*(MM-1)+4					
DT13445+ 40*(MM-1)	Monthly min. date reactive power (export) ②	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13445+ 40*(MM-1)+1	Monthly min. time reactive power (export) ②	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13445+ 40*(MM-1)+2	Monthly min. time reactive power (export) ②	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13445+ 40*(MM-1)+3	Monthly min.reactive power (export) ②	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT13445+ 40*(MM-1)+4					
DT13450+ 40*(MM-1)	Monthly min. date reactive power (export) ③	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13450+ 40*(MM-1)+1	Monthly min. time reactive power (export) ③	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13450+ 40*(MM-1)+2	Monthly min. time reactive power (export) ③	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13450+ 40*(MM-1)+3	Monthly min.reactive power (export) ③	0.001kvar	Unsigned 32bit	0 to 999999999	R
DT13450+ 40*(MM-1)+4					
DT13455+ 40*(MM-1)	Monthly min. date total reactive power (export)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13455+ 40*(MM-1)+1	Monthly min. time total reactive power (export)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13455+ 40*(MM-1)+2	Monthly min. time total reactive power (export)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13455+ 40*(MM-1)+3	Monthly min. total reactive power (export)	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT13455+ 40*(MM-1)+4					

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Data register	Name	Unit	Kind of data	Range	R/W
DT13900+ 50*(MM-1)	Monthly max. date current①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13900+ 50*(MM-1)+1	Monthly max. time current①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13900+ 50*(MM-1)+2	Monthly max. time current①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13900+ 50*(MM-1)+3 DT13900+ 50*(MM-1)+4	Monthly max. current①	0.001A	Unsigned 32bit	0 to 999999999	R
DT13905+ 50*(MM-1)	Monthly max. date current②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13905+ 50*(MM-1)+1	Monthly max. time current②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13905+ 50*(MM-1)+2	Monthly max. time current②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13905+ 50*(MM-1)+3 DT13905+ 50*(MM-1)+4	Monthly max.current②	0.001A	Unsigned 32bit	0 to 999999999	R
DT13910+ 50*(MM-1)	Monthly max. date current③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13910+ 50*(MM-1)+1	Monthly max. time current③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13910+ 50*(MM-1)+2	Monthly max. time current③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13910+ 50*(MM-1)+3 DT13910+ 50*(MM-1)+4	Monthly max. current③	0.001A	Unsigned 32bit	0 to 999999999	R
DT13915+ 50*(MM-1)	Monthly max. date current phaseN	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13915+ 50*(MM-1)+1	Monthly max. time currentphaseN	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13915+ 50*(MM-1)+2	Monthly max. time currentphaseN	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13915+ 50*(MM-1)+3 DT13915+ 50*(MM-1)+4	Monthly max. currentphaseN	0.001A	Unsigned 32bit	0 to 999999999	R
DT13920+ 50*(MM-1)	Monthly max. date current average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13920+ 50*(MM-1)+1	Monthly max. time current average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13920+ 50*(MM-1)+2	Monthly max. time current average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13920+ 50*(MM-1)+3 DT13920+ 50*(MM-1)+4	Monthly max. current average	0.001A	Unsigned 32bit	0 to 999999999	R
DT13925+ 50*(MM-1)	Monthly min. date current①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13925+ 50*(MM-1)+1	Monthly min. time current①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13925+ 50*(MM-1)+2	Monthly min. time current①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13925+ 50*(MM-1)+3 DT13925+ 50*(MM-1)+4	Monthly min. current①	0.001A	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT13930+ 50*(MM-1)	Monthly min. date current②	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13930+ 50*(MM-1)+1	Monthly min. time current②	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13930+ 50*(MM-1)+2	Monthly min. time current②	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13930+ 50*(MM-1)+3 DT13930+ 50*(MM-1)+4	Monthly min. current②	0.001A	Unsigned 32bit	0 to 999999999	R
DT13935+ 50*(MM-1)	Monthly min. date current③	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13935+ 50*(MM-1)+1	Monthly min. time current③	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13935+ 50*(MM-1)+2	Monthly min. time current③	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13935+ 50*(MM-1)+3 DT13935+ 50*(MM-1)+4	Monthly min. current③	0.001A	Unsigned 32bit	0 to 999999999	R
DT13940+ 50*(MM-1)	Monthly min. date current phaseN	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13940+ 50*(MM-1)+1	Monthly min. time currentphaseN	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13940+ 50*(MM-1)+2	Monthly min. time currentphaseN	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13940+ 50*(MM-1)+3 DT13940+ 50*(MM-1)+4	Monthly min. currentphaseN	0.001A	Unsigned 32bit	0 to 999999999	R
DT13945+ 50*(MM-1)	Monthly min. date current average	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT13945+ 50*(MM-1)+1	Monthly min. time current average	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT13945+ 50*(MM-1)+2	Monthly min. time current average	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT13945+ 50*(MM-1)+3 DT13945+ 50*(MM-1)+4	Monthly min. current average	0.001A	Unsigned 32bit	0 to 999999999	R
DT14500+ 40*(MM-1)	Monthly max. date Phase voltage①	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14500+ 40*(MM-1)+1	Monthly max. time Phase voltage①	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14500+ 40*(MM-1)+2	Monthly max. time Phase voltage①	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14500+ 40*(MM-1)+3 DT14500+ 40*(MM-1)+4	Monthly max. Phase voltage①	0.01V	Unsigned 32bit	0 to 999999999	R
DT14505+ 40*(MM-1)	Monthly max. date Phase voltage②	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14505+ 40*(MM-1)+1	Monthly max. time Phase voltage②	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14505+ 40*(MM-1)+2	Monthly max. time Phase voltage②	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14505+ 40*(MM-1)+3 DT14505+ 40*(MM-1)+4	Monthly max. Phase voltage②	0.01V	Unsigned 32bit	0 to 999999999	R

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Data register	Name	Unit	Kind of data	Range	R/W
DT14510+ 40*(MM-1)	Monthly max. date Phase voltage③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14510+ 40*(MM-1)+1	Monthly max. time Phase voltage③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14510+ 40*(MM-1)+2	Monthly max. time Phase voltage③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14510+ 40*(MM-1)+3 DT14510+ 40*(MM-1)+4	Monthly max. Phase voltage③	0.01V	Unsigned 32bit	0 to 999999999	R
DT14515+ 40*(MM-1)	Monthly max. date Phase voltage average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14515+ 40*(MM-1)+1	Monthly max. time Phase voltage average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14515+ 40*(MM-1)+2	Monthly max. time Phase voltage average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14515+ 40*(MM-1)+3 DT14515+ 40*(MM-1)+4	Monthly max. Phase voltage average	0.01V	Unsigned 32bit	0 to 999999999	R
DT14520+ 40*(MM-1)	Monthly min. date Phase voltage①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14520+ 40*(MM-1)+1	Monthly min. time Phase voltage①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14520+ 40*(MM-1)+2	Monthly min. time Phase voltage①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14520+ 40*(MM-1)+3 DT14520+ 40*(MM-1)+4	Monthly min. Phase voltage①	0.01V	Unsigned 32bit	0 to 999999999	R
DT14525+ 40*(MM-1)	Monthly min. date Phase voltage②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14525+ 40*(MM-1)+1	Monthly min. time Phase voltage②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14525+ 40*(MM-1)+2	Monthly min. time Phase voltage②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14525+ 40*(MM-1)+3 DT14525+ 40*(MM-1)+4	Monthly min. Phase voltage②	0.01V	Unsigned 32bit	0 to 999999999	R
DT14530+ 40*(MM-1)	Monthly min. date Phase voltage③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14530+ 40*(MM-1)+1	Monthly min. time Phase voltage③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14530+ 40*(MM-1)+2	Monthly min. time Phase voltage③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14530+ 40*(MM-1)+3 DT14530+ 40*(MM-1)+4	Monthly min. Phase voltage③	0.01V	Unsigned 32bit	0 to 999999999	R
DT14535+ 40*(MM-1)	Monthly min. date Phase voltage average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14535+ 40*(MM-1)+1	Monthly min. time Phase voltage average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14535+ 40*(MM-1)+2	Monthly min. time Phase voltage average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14535+ 40*(MM-1)+3 DT14535+ 40*(MM-1)+4	Monthly min. Phase voltage average	0.01V	Unsigned 32bit	0 to 999999999	R

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Data register	Name	Unit	Kind of data	Range	R/W
DT14980+ 40*(MM-1)	Monthly max. date Line voltage 1-2	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14980+ 40*(MM-1)+1	Monthly max. time Line voltage 1-2	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14980+ 40*(MM-1)+2	Monthly max. time Line voltage 1-2	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14980+ 40*(MM-1)+3 DT14980+ 40*(MM-1)+4	Monthly max. Line voltage 1-2	0.01V	Unsigned 32bit	0 to 999999999	R
DT14985+ 40*(MM-1)	Monthly max. date Line voltage 2-3	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14985+ 40*(MM-1)+1	Monthly max. time Line voltage 2-3	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14985+ 40*(MM-1)+2	Monthly max. time Line voltage 2-3	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14985+ 40*(MM-1)+3 DT14985+ 40*(MM-1)+4	Monthly max. Line voltage 2-3	0.01V	Unsigned 32bit	0 to 999999999	R
DT14990+ 40*(MM-1)	Monthly max. date Line voltage 3-1	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14990+ 40*(MM-1)+1	Monthly max. time Line voltage 3-1	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14990+ 40*(MM-1)+2	Monthly max. time Line voltage 3-1	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14990+ 40*(MM-1)+3 DT14990+ 40*(MM-1)+4	Monthly max. Line voltage 3-1	0.01V	Unsigned 32bit	0 to 999999999	R
DT14995+ 40*(MM-1)	Monthly max. date Line voltage average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT14995+ 40*(MM-1)+1	Monthly max. time Line voltage average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT14995+ 40*(MM-1)+2	Monthly max. time Line voltage average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT14995+ 40*(MM-1)+3 DT14995+ 40*(MM-1)+4	Monthly max. Line voltage average	0.01V	Unsigned 32bit	0 to 999999999	R
DT15000+ 40*(MM-1)	Monthly min. date Line voltage 1-2	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15000+ 40*(MM-1)+1	Monthly min. time Line voltage 1-2	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15000+ 40*(MM-1)+2	Monthly min. time Line voltage 1-2	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15000+ 40*(MM-1)+3 DT15000+ 40*(MM-1)+4	Monthly min. Line voltage 1-2	0.01V	Unsigned 32bit	0 to 999999999	R
DT15005+ 40*(MM-1)	Monthly min. date Line voltage 2-3	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15005+ 40*(MM-1)+1	Monthly min. time Line voltage 2-3	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15005+ 40*(MM-1)+2	Monthly min. time Line voltage 2-3	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15005+ 40*(MM-1)+3 DT15005+ 40*(MM-1)+4	Monthly min. Line voltage 2-3	0.01V	Unsigned 32bit	0 to 999999999	R

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Data register	Name	Unit	Kind of data	Range	R/W
DT15010+ 40*(MM-1)	Monthly min. date Line voltage 3-1	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15010+ 40*(MM-1)+1	Monthly min. time Line voltage 3-1	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15010+ 40*(MM-1)+2	Monthly min. time Line voltage 3-1	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15010+ 40*(MM-1)+3 DT15010+ 40*(MM-1)+4	Monthly min. Line voltage 3-1	0.01V	Unsigned 32bit	0 to 999999999	R
DT15015+ 40*(MM-1)	Monthly min. date Line voltage average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15015+ 40*(MM-1)+1	Monthly min. time Line voltage average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15015+ 40*(MM-1)+2	Monthly min. time Line voltage average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15015+ 40*(MM-1)+3 DT15015+ 40*(MM-1)+4	Monthly min. Line voltage average	0.01V	Unsigned 32bit	0 to 999999999	R
DT15460+ 32*(MM-1)	Monthly max. date PF①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15460+ 32*(MM-1)+1	Monthly max. time PF①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15460+ 32*(MM-1)+2	Monthly max. time PF①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15460+ 32*(MM-1)+3	Monthly max. PF①	0.001	Signed 16bit	-1000 to 1000	R
DT15464+ 32*(MM-1)	Monthly max. date PF②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15464+ 32*(MM-1)+1	Monthly max. time PF②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15464+ 32*(MM-1)+2	Monthly max. time PF②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15464+ 32*(MM-1)+3	Monthly max. PF②	0.001	Signed 16bit	-1000 to 1000	R
DT15468+ 32*(MM-1)	Monthly max. date PF③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15468+ 32*(MM-1)+1	Monthly max. time PF③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15468+ 32*(MM-1)+2	Monthly max. time PF③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15468+ 32*(MM-1)+3	Monthly max. PF③	0.001	Signed 16bit	-1000 to 1000	R
DT15472+ 32*(MM-1)	Monthly max. date PF average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15472+ 32*(MM-1)+1	Monthly max. time PF average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15472+ 32*(MM-1)+2	Monthly max. time PF average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15472+ 32*(MM-1)+3	Monthly max. PF average	0.001	Signed 16bit	-1000 to 1000	R
DT15476+ 32*(MM-1)	Monthly min. date PF①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15476+ 32*(MM-1)+1	Monthly min. time PF①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15476+ 32*(MM-1)+2	Monthly min. time PF①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15476+ 32*(MM-1)+3	Monthly min. PF①	0.001	Signed 16bit	-1000 to 1000	R

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Data register	Name	Unit	Kind of data	Range	R/W
DT15480+ 32*(MM-1)	Monthly min. date PF②	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15480+ 32*(MM-1)+1	Monthly min. time PF②	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15480+ 32*(MM-1)+2	Monthly min. time PF②	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15480+ 32*(MM-1)+3	Monthly min. PF②	0.001	Signed 16bit	-1000 to 1000	R
DT15484+ 32*(MM-1)	Monthly min. date PF③	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15484+ 32*(MM-1)+1	Monthly min. time PF③	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15484+ 32*(MM-1)+2	Monthly min. time PF③	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15484+ 32*(MM-1)+3	Monthly min. PF③	0.001	Signed 16bit	-1000 to 1000	R
DT15488+ 32*(MM-1)	Monthly min. date PF average	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15488+ 32*(MM-1)+1	Monthly min. time PF average	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15488+ 32*(MM-1)+2	Monthly min. time PF average	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15488+ 32*(MM-1)+3	Monthly min. PF average	0.001	Signed 16bit	-1000 to 1000	R
DT15844+ 32*(MM-1)	Monthly max. date Frequency①	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15844+ 32*(MM-1)+1	Monthly max. time Frequency①	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15844+ 32*(MM-1)+2	Monthly max. time Frequency①	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15844+ 32*(MM-1)+3	Monthly max. Frequency①	0.01Hz	Unsigned 16bit	0 to 9999	R
DT15848+ 32*(MM-1)	Monthly max. date Frequency②	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15848+ 32*(MM-1)+1	Monthly max. time Frequency②	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15848+ 32*(MM-1)+2	Monthly max. time Frequency②	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15848+ 32*(MM-1)+3	Monthly max. Frequency②	0.01Hz	Unsigned 16bit	0 to 9999	R
DT15852+ 32*(MM-1)	Monthly max. date Frequency③	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15852+ 32*(MM-1)+1	Monthly max. time Frequency③	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15852+ 32*(MM-1)+2	Monthly max. time Frequency③	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15852+ 32*(MM-1)+3	Monthly max. Frequency③	0.01Hz	Unsigned 16bit	0 to 9999	R
DT15856+ 32*(MM-1)	Monthly max. date Frequency average	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15856+ 32*(MM-1)+1	Monthly max. time Frequency average	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15856+ 32*(MM-1)+2	Monthly max. time Frequency average	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15856+ 32*(MM-1)+3	Monthly max. Frequency average	0.01Hz	Unsigned 16bit	0 to 9999	R

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Data register	Name	Unit	Kind of data	Range	R/W
DT15860+ 32*(MM-1)	Monthly min. date Frequency①	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15860+ 32*(MM-1)+1	Monthly min. time Frequency①	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15860+ 32*(MM-1)+2	Monthly min. time Frequency①	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15860+ 32*(MM-1)+3	Monthly min. Frequency①	0.01Hz	Unsigned 16bit	0 to 9999	R
DT15864+ 32*(MM-1)	Monthly min. date Frequency②	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15864+ 32*(MM-1)+1	Monthly min. time Frequency②	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15864+ 32*(MM-1)+2	Monthly min. time Frequency②	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15864+ 32*(MM-1)+3	Monthly min. Frequency②	0.01Hz	Unsigned 16bit	0 to 9999	R
DT15868+ 32*(MM-1)	Monthly min. date Frequency③	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15868+ 32*(MM-1)+1	Monthly min. time Frequency③	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15868+ 32*(MM-1)+2	Monthly min. time Frequency③	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15868+ 32*(MM-1)+3	Monthly min. Frequency③	0.01Hz	Unsigned 16bit	0 to 9999	R
DT15872+ 32*(MM-1)	Monthly min. date Frequency average	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT15872+ 32*(MM-1)+1	Monthly min. time Frequency average	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT15872+ 32*(MM-1)+2	Monthly min. time Frequency average	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT15872+ 32*(MM-1)+3	Monthly min. Frequency average	0.01Hz	Unsigned 16bit	0 to 9999	R
DT16228+ 10*(MM-1)	Monthly max. date voltage unbalancing	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT16228+ 10*(MM-1)+1	Monthly max. time voltage unbalancing	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT16228+ 10*(MM-1)+2	Monthly max. time voltage unbalancing	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT16228+ 10*(MM-1)+3 DT16228+ 10*(MM-1)+4	Monthly max. voltage unbalancing	0.001%	Unsigned 32bit	0 to 999999	R
DT16233+ 10*(MM-1)	Monthly min. date voltage unbalancing	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT16233+ 10*(MM-1)+1	Monthly min. time voltage unbalancing	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT16233+ 10*(MM-1)+2	Monthly min. time voltage unbalancing	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT16233+ 10*(MM-1)+3 DT16233+ 10*(MM-1)+4	Monthly min. voltage unbalancing	0.001%	Unsigned 32bit	0 to 999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT16348+ 10*(MM-1)	Monthly max. date current unbalancing	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT16348+ 10*(MM-1)+1	Monthly max. time current unbalancing	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT16348+ 10*(MM-1)+2	Monthly max. time current unbalancing	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT16348+ 10*(MM-1)+3 DT16348+ 10*(MM-1)+4	Monthly max. current unbalancing	0.001%	Unsigned 32bit	0 to 999999	R
DT16353+ 10*(MM-1)	Monthly min. date current unbalancing	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT16353+ 10*(MM-1)+1	Monthly min. time current unbalancing	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT16353+ 10*(MM-1)+2	Monthly min. time current unbalancing	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT16353+ 10*(MM-1)+3 DT16353+ 10*(MM-1)+4	Monthly min. current unbalancing	0.001%	Unsigned 32bit	0 to 999999	R
DT16468+ 40*(MM-1) DT16468+ 40*(MM-1)+1	Monthly integral active power①(T1)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16470+ 40*(MM-1) DT16470+ 40*(MM-1)+1	Monthly integral active power②(T1)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16472+ 40*(MM-1) DT16472+ 40*(MM-1)+1	Monthly integral active power③(T1)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16474+ 40*(MM-1) DT16474+ 40*(MM-1)+1	Monthly total integral active power(T1)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT16476+ 40*(MM-1) DT16476+ 40*(MM-1)+1	Monthly integral active power①(T2)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16478+ 40*(MM-1) DT16478+ 40*(MM-1)+1	Monthly integral active power②(T2)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16480+ 40*(MM-1) DT16480+ 40*(MM-1)+1	Monthly integral active power③(T2)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16482+ 40*(MM-1) DT16482+ 40*(MM-1)+1	Monthly total integral active power(T2)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT16484+ 40*(MM-1) DT16484+ 40*(MM-1)+1	Monthly integral active power①(T3)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16486+ 40*(MM-1) DT16486+ 40*(MM-1)+1	Monthly integral active power②(T3)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16488+ 40*(MM-1) DT16488+ 40*(MM-1)+1	Monthly integral active power③(T3)	0.001kWh	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT16490+ 40*(MM-1)	Monthly total integral active power(T3)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT16490+ 40*(MM-1)+1					
DT16492+ 40*(MM-1)	Monthly integral active power①(T4)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16492+ 40*(MM-1)+1					
DT16494+ 40*(MM-1)	Monthly integral active power②(T4)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16494+ 40*(MM-1)+1					
DT16496+ 40*(MM-1)	Monthly integral active power③(T4)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16496+ 40*(MM-1)+1					
DT16498+ 40*(MM-1)	Monthly total integral active power(T4)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT16498+ 40*(MM-1)+1					
DT16500+ 40*(MM-1)	Monthly integral active power①(T)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16500+ 40*(MM-1)+1					
DT16502+ 40*(MM-1)	Monthly integral active power②(T)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16502+ 40*(MM-1)+1					
DT16504+ 40*(MM-1)	Monthly integral active power③(T)	0.001kWh	Unsigned 32bit	0 to 999999999	R
DT16504+ 40*(MM-1)+1					
DT16506+ 40*(MM-1)	Monthly total integral active power(T)	0.001kWh	Unsigned 32bit	0 to 2999999997	R
DT16506+ 40*(MM-1)+1					
DT16948+ 40*(MM-1)	Monthly integral reactive power①(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16948+ 40*(MM-1)+1					
DT16950+ 40*(MM-1)	Monthly integral reactive power②(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16950+ 40*(MM-1)+1					
DT16952+ 40*(MM-1)	Monthly integral reactive power③(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16952+ 40*(MM-1)+1					
DT16954+ 40*(MM-1)	Monthly totalintegral reactive power(T1)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT16954+ 40*(MM-1)+1					
DT16956+ 40*(MM-1)	Monthly integral reactive power①(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16956+ 40*(MM-1)+1					
DT16958+ 40*(MM-1)	Monthly integral reactive power②(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16958+ 40*(MM-1)+1					
DT16960+ 40*(MM-1)	Monthly integral reactive power③(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16960+ 40*(MM-1)+1					

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT16962+ 40*(MM-1) DT16962+ 40*(MM-1)+1	Monthly totalintegral reactive power(T2)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT16964+ 40*(MM-1) DT16964+ 40*(MM-1)+1	Monthly integral reactive power①(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16966+ 40*(MM-1) DT16966+ 40*(MM-1)+1	Monthly integral reactive power②(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16968+ 40*(MM-1) DT16968+ 40*(MM-1)+1	Monthly integral reactive Power③(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16970+ 40*(MM-1) DT16970+ 40*(MM-1)+1	Monthly total integral reactive power(T3)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT16972+ 40*(MM-1) DT16972+ 40*(MM-1)+1	Monthly integral reactive power①(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16974+ 40*(MM-1) DT16974+ 40*(MM-1)+1	Monthly integral reactive power②(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16976+ 40*(MM-1) DT16976+ 40*(MM-1)+1	Monthly integral reactive power③(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16978+ 40*(MM-1) DT16978+ 40*(MM-1)+1	Monthly total integral reactive power(T4)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT16980+ 40*(MM-1) DT16980+ 40*(MM-1)+1	Monthly integral reactive power①(T)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16982+ 40*(MM-1) DT16982+ 40*(MM-1)+1	Monthly integral reactive power②(T)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16984+ 40*(MM-1) DT16984+ 40*(MM-1)+1	Monthly integral reactive power③(T)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT16986+ 40*(MM-1) DT16986+ 40*(MM-1)+1	Monthly total integral reactive power(T)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT17428+ 40*(MM-1) DT17428+ 40*(MM-1)+1	Monthly integral apparent power①(T1)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17430+ 40*(MM-1) DT17430+ 40*(MM-1)+1	Monthly integral apparent power②(T1)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17432+ 40*(MM-1) DT17432+ 40*(MM-1)+1	Monthly integral apparent power③(T1)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT17434+ 40*(MM-1) DT17434+ 40*(MM-1)+1	Monthly total integral apparent power(T1)	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT17436+ 40*(MM-1) DT17436+ 40*(MM-1)+1	Monthly integral apparent power①(T2)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17438+ 40*(MM-1) DT17438+ 40*(MM-1)+1	Monthly integral apparent power②(T2)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17440+ 40*(MM-1) DT17440+ 40*(MM-1)+1	Monthly integral apparent power③(T2)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17442+ 40*(MM-1) DT17442+ 40*(MM-1)+1	Monthly total integral apparent power(T2)	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT17444+ 40*(MM-1) DT17444+ 40*(MM-1)+1	Monthly integral apparent power①(T3)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17446+ 40*(MM-1) DT17446+ 40*(MM-1)+1	Monthly integral apparent power②(T3)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17448+ 40*(MM-1) DT17448+ 40*(MM-1)+1	Monthly integral apparent power③(T3)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17450+ 40*(MM-1) DT17450+ 40*(MM-1)+1	Monthly total integral apparent power(T3)	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT17452+ 40*(MM-1) DT17452+ 40*(MM-1)+1	Monthly integral apparent power①(T4)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17454+ 40*(MM-1) DT17454+ 40*(MM-1)+1	Monthly integral apparent power②(T4)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17456+ 40*(MM-1) DT17456+ 40*(MM-1)+1	Monthly integral apparent power③(T4)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17458+ 40*(MM-1) DT17458+ 40*(MM-1)+1	Monthly total integral apparent power(T4)	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT17460+ 40*(MM-1) DT17460+ 40*(MM-1)+1	Monthly integral apparent power①(T)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17462+ 40*(MM-1) DT17462+ 40*(MM-1)+1	Monthly integral apparent power②(T)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R
DT17464+ 40*(MM-1) DT17464+ 40*(MM-1)+1	Monthly integral apparent power③(T)	0.001 kVAh	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT17466+ 40*(MM-1)	Monthly total integral apparent power(T)	0.001 kVAh	Unsigned 32bit	0 to 2999999997	R
DT17466+ 40*(MM-1)+1					
DT17908+ 40*(MM-1)	Monthly Integral active power (export) ①(T1)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17908+ 40*(MM-1)+1					
DT17910+ 40*(MM-1)	Monthly Integral active power (export) ②(T1)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17910+ 40*(MM-1)+1					
DT17912+ 40*(MM-1)	Monthly Integral active power (export) ③(T1)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17912+ 40*(MM-1)+1					
DT17914+ 40*(MM-1)	Monthly total Integral active power (export) (T1)	0.001 kWh	Unsigned 32bit	0 to 2999999997	R
DT17914+ 40*(MM-1)+1					
DT17916+ 40*(MM-1)	Monthly Integral active power (export) ①(T2)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17916+ 40*(MM-1)+1					
DT17918+ 40*(MM-1)	Monthly Integral active power (export) ②(T2)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17918+ 40*(MM-1)+1					
DT17920+ 40*(MM-1)	Monthly Integral active power (export) ③(T2)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17920+ 40*(MM-1)+1					
DT17922+ 40*(MM-1)	Monthly total Integral active power (export) (T2)	0.001 kWh	Unsigned 32bit	0 to 2999999997	R
DT17922+ 40*(MM-1)+1					
DT17924+ 40*(MM-1)	Monthly Integral active power (export) ①(T3)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17924+ 40*(MM-1)+1					
DT17926+ 40*(MM-1)	Monthly Integral active power (export) ②(T3)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17926+ 40*(MM-1)+1					
DT17928+ 40*(MM-1)	Monthly Integral active power (export) ③(T3)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17928+ 40*(MM-1)+1					
DT17930+ 40*(MM-1)	Monthly total Integral active power (export) (T3)	0.001 kWh	Unsigned 32bit	0 to 2999999997	R
DT17930+ 40*(MM-1)+1					
DT17932+ 40*(MM-1)	Monthly Integral active power (export) ①(T4)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17932+ 40*(MM-1)+1					
DT17934+ 40*(MM-1)	Monthly Integral active power (export) ②(T4)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17934+ 40*(MM-1)+1					
DT17936+ 40*(MM-1)	Monthly Integral active power (export) ③(T4)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17936+ 40*(MM-1)+1					

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT17938+ 40*(MM-1) DT17938+ 40*(MM-1)+1	Monthly total Integral active power (export) (T4)	0.001 kWh	Unsigned 32bit	0 to 2999999997	R
DT17940+ 40*(MM-1) DT17940+ 40*(MM-1)+1	Monthly Integral active power (export) ①(T)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17942+ 40*(MM-1) DT17942+ 40*(MM-1)+1	Monthly Integral active power (export) ②(T)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17944+ 40*(MM-1) DT17944+ 40*(MM-1)+1	Monthly Integral active power (export) ③(T)	0.001 kWh	Unsigned 32bit	0 to 999999999	R
DT17946+ 40*(MM-1) DT17946+ 40*(MM-1)+1	Monthly total Integral active power (export) (T)	0.001 kWh	Unsigned 32bit	0 to 2999999997	R
DT18388+ 40*(MM-1) DT18388+ 40*(MM-1)+1	Monthly Integral reactive power (export) ①(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18390+ 40*(MM-1) DT18390+ 40*(MM-1)+1	Monthly Integral reactive power (export) ②(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18392+ 40*(MM-1) DT18392+ 40*(MM-1)+1	Monthly Integral reactive power (export) ③(T1)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18394+ 40*(MM-1) DT18394+ 40*(MM-1)+1	Monthly total Integral reactive power (export) (T1)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT18396+ 40*(MM-1) DT18396+ 40*(MM-1)+1	MonthlyIntegral reactive power (export) ①(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18398+ 40*(MM-1) DT18398+ 40*(MM-1)+1	Monthly Integral reactive power (export) ②(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18400+ 40*(MM-1) DT18400+ 40*(MM-1)+1	Monthly Integral reactive power (export) ③(T2)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18402+ 40*(MM-1) DT18402+ 40*(MM-1)+1	Monthly total Integral reactive power (export) (T2)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT18404+ 40*(MM-1) DT18404+ 40*(MM-1)+1	Monthly Integral reactive power (export) ①(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18406+ 40*(MM-1) DT18406+ 40*(MM-1)+1	Monthly Integral reactive power (export) ②(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18408+ 40*(MM-1) DT18408+ 40*(MM-1)+1	Monthly Integral reactive power (export) ③(T3)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT18410+ 40*(MM-1)	Monthly total Integral reactive power (export) (T3)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT18410+ 40*(MM-1)+1					
DT18412+ 40*(MM-1)	Monthly Integral reactive power (export) ①(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18412+ 40*(MM-1)+1					
DT18414+ 40*(MM-1)	Monthly Integral reactive power (export) ②(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18414+ 40*(MM-1)+1					
DT18416+ 40*(MM-1)	Monthly Integral reactive power (export) ③(T4)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18416+ 40*(MM-1)+1					
DT18418+ 40*(MM-1)	Monthly total Integral reactive power (export) (T4)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT18418+ 40*(MM-1)+1					
DT18420+ 40*(MM-1)	Monthly Integral reactive power (export) ①(T)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18420+ 40*(MM-1)+1					
DT18422+ 40*(MM-1)	Monthly Integral reactive power (export) ②(T)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18422+ 40*(MM-1)+1					
DT18424+ 40*(MM-1)	Monthly Integral reactive power (export) ③(T)	0.001 kvarh	Unsigned 32bit	0 to 999999999	R
DT18424+ 40*(MM-1)+1					
DT18426+ 40*(MM-1)	Monthly total Integral reactive power (export) (T)	0.001 kvarh	Unsigned 32bit	0 to 2999999997	R
DT18426+ 40*(MM-1)+1					
DT19000+ 6*(n-1)	Power interruption n time date	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT19000+ 6*(n-1)+1	Power interruption n time	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT19000+ 6*(n-1)+2	Power interruption n time	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT19000+ 6*(n-1)+3	Phase of power interruption n	—	Unsigned 16bit	1:Phase1,2:Phase2,3:Phase3	R
DT19000+ 6*(n-1)+4	Power interruption n period	1ms	Unsigned 32bit	0 to 999999999	R
DT19000+ 6*(n-1)+5					
DT19060+ 6*(n-1)	Under voltage n date	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT19060+ 6*(n-1)+1	Under voltage n time	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT19060+ 6*(n-1)+2	Under voltage n time	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT19060+ 6*(n-1)+3	Phase of under voltage n	—	Unsigned 16bit	1:Phase1,2:Phase2,3:Phase3	R
DT19060+ 6*(n-1)+4	Under voltage n period	1ms	Unsigned 32bit	0 to 999999999	R
DT19060+ 6*(n-1)+5					

*MM means ‘1 to 12’ for month, January to December.
*n shows ‘1 to 10’.

Data register	Name	Unit	Kind of data	Range	R/W
DT19120+ 6*(n-1)	Over voltage n date	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT19120+ 6*(n-1)+1	Over voltage n time	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT19120+ 6*(n-1)+2	Over voltage n time	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT19120+ 6*(n-1)+3	Phase of over voltage n	–	Unsigned 16bit	1:Phase1,2:Phase2,3:Phase3	R
DT19120+ 6*(n-1)+4 / DT19120+ 6*(n-1)+5	Over voltage n period	1ms	Unsigned 32bit	0 to 999999999	R
DT19180+ 6*(n-1)	Over current n date	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT19180+ 6*(n-1)+1	Over current n time	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT19180+ 6*(n-1)+2	Over current n time	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT19180+ 6*(n-1)+3	Phase of over current n	–	Unsigned 16bit	1:Phase1,2:Phase2,3:Phase3	R
DT19180+ 6*(n-1)+4 / DT19180+ 6*(n-1)+5	Over current n period	1ms	Unsigned 32bit	0 to 999999999	R
DT19240+ 6*(n-1)	Under current n date	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT19240+ 6*(n-1)+1	Under current n time	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT19240+ 6*(n-1)+2	Under current n time	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT19240+ 6*(n-1)+3	Phase of under current n	–	Unsigned 16bit	1:Phase1,2:Phase2,3:Phase3	R
DT19240+ 6*(n-1)+4 / DT19240+ 6*(n-1)+5	Under current n period	1ms	Unsigned 32bit	0 to 999999999	R
DT19301+ 6*(n-1)	OUT1 Output log n Occurance date	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT19301+ 6*(n-1)+1	OUT1 Output log n Occurance time	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT19301+ 6*(n-1)+2	OUT1 Output log n Occurance time	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT19361+ 6*(n-1)	OUT2 Output log n Occurance date	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT19361+ 6*(n-1)+1	OUT2 Output log n Occurance time	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT19361+ 6*(n-1)+2	OUT2 Output log n Occurance time	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31000+ 75*(MM-1)	Monthly max. demand date current1(T1)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31000+ 75*(MM-1)+1	Monthly max. demand time current1(T1)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31000+ 75*(MM-1)+2	Monthly max. demand time current1(T1)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31000+ 75*(MM-1)+3 / DT31000+ 75*(MM-1)+4	Monthly max.demand current1(T1)	0.001A	Unsigned 32bit	0 to 999999999	R

*n shows ‘1 to 10’.

Data register	Name	Unit	Kind of data	Range	R/W
DT31005+ 75*(MM-1)	Monthly max. demand date current2(T1)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31005+ 75*(MM-1)+1	Monthly max. demand time current2(T1)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31005+ 75*(MM-1)+2	Monthly max. demand time current2(T1)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31005+ 75*(MM-1)+3 DT31005+ 75*(MM-1)+4	Monthly max.demand current2(T1)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31010+ 75*(MM-1)	Monthly max. demand date current3(T1)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31010+ 75*(MM-1)+1	Monthly max. demand time current3(T1)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31010+ 75*(MM-1)+2	Monthly max. demand time current3(T1)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31010+ 75*(MM-1)+3 DT31010+ 75*(MM-1)+4	Monthly max.demand current3(T1)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31015+ 75*(MM-1)	Monthly max. demand date current1(T2)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31015+ 75*(MM-1)+1	Monthly max. demand time current1(T2)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31015+ 75*(MM-1)+2	Monthly max. demand time current1(T2)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31015+ 75*(MM-1)+3 DT31015+ 75*(MM-1)+4	Monthly max.demand current1(T2)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31020+ 75*(MM-1)	Monthly max. demand date current2(T2)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31020+ 75*(MM-1)+1	Monthly max. demand time current2(T2)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31020+ 75*(MM-1)+2	Monthly max. demand time current2(T2)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31020+ 75*(MM-1)+3 DT31020+ 75*(MM-1)+4	Monthly max.demand current2(T2)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31025+ 75*(MM-1)	Monthly max. demand date current3(T2)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31025+ 75*(MM-1)+1	Monthly max. demand Time current3(T2)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31025+ 75*(MM-1)+2	Monthly max. demand Time current3(T2)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
T31025+ 75*(MM-1)+3 DT31025+ 75*(MM-1)+4	Monthly max.demand current3(T2)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31030+ 75*(MM-1)	Monthly max. demand date current1(T3)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31030+ 75*(MM-1)+1	Monthly max. demand time current1(T3)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31030+ 75*(MM-1)+2	Monthly max. demand time current1(T3)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31030+ 75*(MM-1)+3 DT31030+ 75*(MM-1)+4	Monthly max.demand current1(T3)	0.001A	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT31035+ 75*(MM-1)	Monthly max. demand date current2(T3)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31035+ 75*(MM-1)+1	Monthly max. demand time current2(T3)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31035+ 75*(MM-1)+2	Monthly max. demand time current2(T3)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31035+ 75*(MM-1)+3 DT31035+ 75*(MM-1)+4	Monthly max.demand current2(T3)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31040+ 75*(MM-1)	Monthly max. demand date current3 (T3)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31040+ 75*(MM-1)+1	Monthly max. demand time current3(T3)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31040+ 75*(MM-1)+2	Monthly max. demand time current3(T3)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31040+ 75*(MM-1)+3 DT31040+ 75*(MM-1)+4	Monthly max.demand current3(T3)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31045+ 75*(MM-1)	Monthly max. demand date current1(T4)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31045+ 75*(MM-1)+1	Monthly max. demand time current1(T4)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31045+ 75*(MM-1)+2	Monthly max. demand time current1(T4)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31045+ 75*(MM-1)+3 DT31045+ 75*(MM-1)+4	Monthly max.demand current1(T4)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31050+ 75*(MM-1)	Monthly max. demand date current2(T4)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31050+ 75*(MM-1)+1	Monthly max. demand time current2(T4)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31050+ 75*(MM-1)+2	Monthly max. demand time current2(T4)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31050+ 75*(MM-1)+3 DT31050+ 75*(MM-1)+4	Monthly max.demand current2(T4)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31055+ 75*(MM-1)	Monthly max. demand date current3(T4)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31055+ 75*(MM-1)+1	Monthly max. demand time current3(T4)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31055+ 75*(MM-1)+2	Monthly max. demand time current3(T4)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31055+ 75*(MM-1)+3 DT31055+ 75*(MM-1)+4	Monthly max.demand current3(T4)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31060+ 75*(MM-1)	Monthly max. demand date current1(T)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31060+ 75*(MM-1)+1	Monthly max. demand time current1(T)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31060+ 75*(MM-1)+2	Monthly max. demand time current1(T)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31060+ 75*(MM-1)+3 DT31060+ 75*(MM-1)+4	Monthly max.demand current1(T)	0.001A	Unsigned 32bit	0 to 999999999	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT31065+ 75*(MM-1)	Monthly max. demand date current2(T)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31065+ 75*(MM-1)+1	Monthly max. demand time current2(T)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31065+ 75*(MM-1)+2	Monthly max. demand time current2(T)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31065+ 75*(MM-1)+3 DT31065+ 75*(MM-1)+4	Monthly max.demand current2(T)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31070+ 75*(MM-1)	Monthly max. demand date current3(T)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31070+ 75*(MM-1)+1	Monthly max. demand time current3(T)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31070+ 75*(MM-1)+2	Monthly max. demand time current3(T)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31070+ 75*(MM-1)+3 DT31070+ 75*(MM-1)+4	Monthly max.demand current3(T)	0.001A	Unsigned 32bit	0 to 999999999	R
DT31900	Max. demand date active power	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31901	Max. demand time active power	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31902	Max. demand time active power	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31903 DT31904	Max. demand value active power	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT31905	Max. demand date reactive power	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31906	Max. demand time reactive power	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31907	Max. demand time reactive power	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31908 DT31909	Max. demand value reactive power	0.001kvar	Unsigned 32bit	0 to 2999999997	R
DT31910	Max. demand date apparent power	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31911	Max. demand time apparent power	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31912	Max. demand time apparent power	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31913 DT31914	Max. demand value apparent power	0.001kVA	Unsigned 32bit	0 to 2999999997	R
DT31915	Max. demand date active power (export)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31916	Max. demand time active power (export)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31917	Max. demand time active power (export)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31918 DT31919	Max. demand value active power (export)	0.001kW	Unsigned 32bit	0 to 2999999997	R
DT31920	Max. demand date reactive power (export)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	R
DT31921	Max. demand time reactive power (export)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	R
DT31922	Max. demand time reactive power (export)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	R
DT31923 DT31924	Max. demand value reactive power (export)	0.001kvar	Unsigned 32bit	0 to 2999999997	R

*MM means ‘1 to 12’ for month, January to December.

Data register	Name	Unit	Kind of data	Range	R/W
DT31925	Max. demand date current1	–	Unsigned 16bit	Higher yy:00H to 99H, Lower mm:01H to 12H	R
DT31926	Max. demand time current1	–	Unsigned 16bit	Higher dd:01H to 31H, Lower hh:00H to 23H	R
DT31927	Max. demand time current1	–	Unsigned 16bit	Higher min,:00H to 59H, Lower ss:00H to 59H	R
DT31928 DT31929	Max. demand value current1	0.001A	Unsigned 32bit	0 to 999999999	R
DT31930	Max. demand date current2	–	Unsigned 16bit	Higher yy:00H to 99H, Lower mm:01H to 12H	R
DT31931	Max. demand time current2	–	Unsigned 16bit	Higher dd:01H to 31H, Lower hh:00H to 23H	R
DT31932	Max. demand time current2	–	Unsigned 16bit	Higher min,:00H to 59H, Lower ss:00H to 59H	R
DT31933 DT31934	Max. demand value current2	0.001A	Unsigned 32bit	0 to 999999999	R
DT31935	Max. demand date current3	–	Unsigned 16bit	Higher yy:00H to 99H, Lower mm:01H to 12H	R
DT31936	Max. demand time current3	–	Unsigned 16bit	Higher dd:01H to 31H, Lower hh:00H to 23H	R
DT31937	Max. demand time current3	–	Unsigned 16bit	Higher min,:00H to 59H, Lower ss:00H to 59H	R
DT31938 DT31939	Max. demand value current3	0.001A	Unsigned 32bit	0 to 999999999	R

* 'Range' is not the measurement range, it shows the data range.

Note1) R: Read W: Write

2) Data register except specified is 0.

3) If each setting value is wrote by communication, it memories to internal memory at the same time. Therefore, change setting frequently makes the internal memory's life short. Avoid to usage like this.

4) Write a data within the range when you write it.

1.3.3 Error Codes

◇Basic procedure errors

Error code	Error name	Explanation
40H	Bcc error	・A Bcc error occurred in the command data.
41H	Format error	・A command message was sent that does not fit the transmission format.
42H	No support error	・A command was sent that is not supported.
43H	Procedure error	・Delimiter with multiple frames was sent. ・The response shall be multiple frames.

◇Application error

Error code	Error name	Explanation
60H	Parameter error	・The data code is not “D”.
61H	Data error	・Word No. is specified without decimal.(0000F etc.) ・The starting word No. is bigger than the ending word No. ・Writing data has a code that is not hexadecimal.
62H	Registration error	・Too many registrations have been entered (more than 17). ・“MD” command was sent when some registration has been exist. ・“MG” command was sent when registration has not been entered.

◇Self-diagnostic error

Error code	Error name	Explanation
45H	Operation error	・At “WD” command, writing data is exceeded the range of data register.

1.3.4 Command

Eco-POWER METER has 5 kinds of commands.

Command name	Code	Explanation
Read data area	RD	Reads the contents of data area.
Write data to data area	WD	Writes data to a data area.
Resister or Reset data monitored	MD	Resisters the data to be monitored.
Monitoring start	MG	Monitors a registered data.
Read status	RT	Reads the specifications of Eco-POWER METER and error code if an error occurs.

◆[RD]: Read data area (Reads the contents of data area.)

◇Command

%	Destination ×10¹ ×10⁰	#	R	D	D	Starting word No. 5 characters ×10⁴ ×10³ ×10² ×10¹ ×10⁰	Ending word No. 5 characters ×10⁴ ×10³ ×10² ×10¹ ×10⁰	Bcc ×16¹ ×16⁰	CR

◇Normal response (Read successful)

%	Source ×10¹ ×10⁰	$	R	D	First register contents 4 characters ×16¹ ×16⁰ ×16³ ×16²	Last register contents 4 characters ×16¹ ×16⁰ ×16³ ×16²	Bcc ×16¹ ×16⁰	CR

(lower word) (higher word) (lower word) (higher word)

◇Error response

%	Source ×10¹ ×10⁰	!	Error code ×16¹ ×16⁰	Bcc ×16¹ ×16⁰	CR

(Common to each command)

◆[WD]: Write data area (Writes date to a data area.)

◇Command

%	Destination ×10¹ ×10⁰	#	W	D	D	Starting word No. 5 characters ×10⁴ ×10³ ×10² ×10¹ ×10⁰	Ending word No. 5 characters ×10⁴ ×10³ ×10² ×10¹ ×10⁰	First writing data 4 characters ×16¹ ×16⁰ ×16³ ×16²	⇒

(lower word) (higher word)

◇Normal response (Write successful)

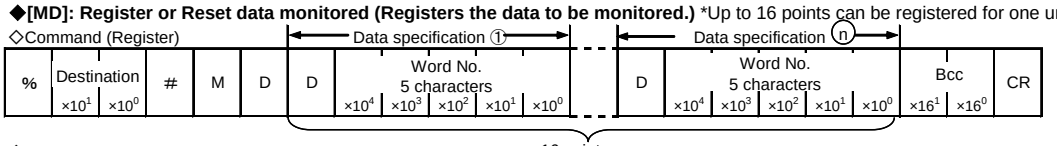
%	Source ×10¹ ×10⁰	$	W	D	Bcc ×16¹ ×16⁰	CR

⇒	Last writing data 4 characters ×16¹ ×16⁰ ×16³ ×16²	Bcc ×16¹ ×16⁰	CR

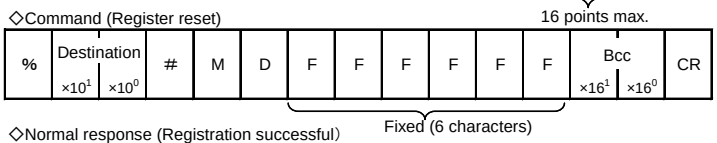
(lower word) (higher word)

◆[MD]: Register or Reset data monitored (Registers the data to be monitored.) *Up to 16 points can be registered for one unit.

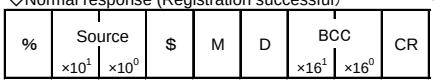
◇Command (Register)


Data specification ①
Data specification n
% Destination ×10¹ ×10⁰ # M D D Word No. 5 characters ×10⁴ ×10³ ×10² ×10¹ ×10⁰ D Word No. 5 characters ×10⁴ ×10³ ×10² ×10¹ ×10⁰ Bcc ×16¹ ×16⁰ CR

◇Command (Register reset)

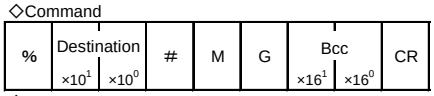


◇Normal response (Registration successful)

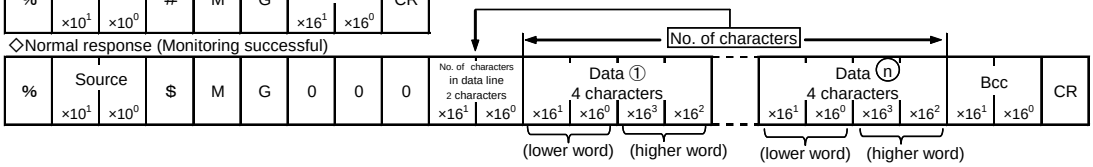


◆[MG]: Monitoring start (Monitors a registered data.)

◇Command



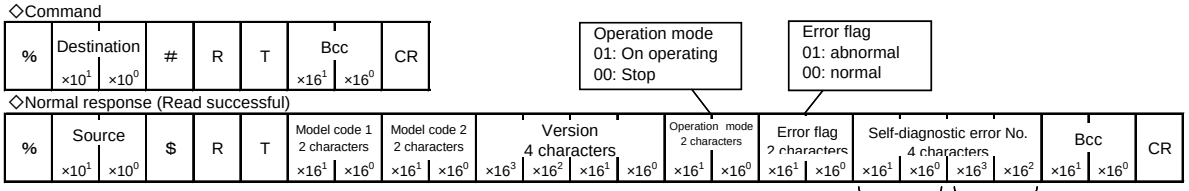
◇Normal response (Monitoring successful)


No. of characters
% Source ×10¹ ×10⁰ $ M G 0 0 0 No. of characters in data line 2 characters ×16¹ ×16⁰ Data ① 4 characters ×16¹ ×16⁰ ×16³ ×16² Data n 4 characters ×16¹ ×16⁰ ×16³ ×16² Bcc ×16¹ ×16⁰ CR
(lower word) (higher word)
(lower word) (higher word)

◆[RT]: Read the status of Eco-POWER METER (Reads the specifications of Eco-POWER METER and error codes if an error occurs.)

◇Command

◇Normal response (Read successful)


Operation mode 01: On operating 00: Stop
Error flag 01: abnormal 00: normal
% Source ×10¹ ×10⁰ $ R T Model code 1 2 characters ×16¹ ×16⁰ Model code 2 2 characters ×16¹ ×16⁰ Version 4 characters ×16³ ×16² ×16¹ ×16⁰ Operation mode 2 characters ×16¹ ×16⁰ Error flag 2 characters ×16¹ ×16⁰ Self-diagnostic error No. 4 characters ×16¹ ×16⁰ ×16³ ×16² Bcc ×16¹ ×16⁰ CR
(lower word) (higher word)

*With this unit, it responses "99" for Model code1, "16" for Model code2.

Note) The maximum number of reading slaves is 26 (57 bytes), the maximum number of writing slaves is 23 (55 bytes).

1.4 MODBUS (RTU) Communication

1.4.1 Overview of MODBUS (RTU)

◆8-bit binary data in command is transmitted as it is.

Data format	Start bit	: 1 bit
	Data bit	: 8 bits (Fixed)
	Parity	: No parity, Even parity, Odd parity Selectable
	Stop bit	: 1-bit, 2-bit Selectable
	Error detection	: CRC-16 (Cyclic Redundancy Check)
	Data interval	: 3.5 character transmission time or less

◆Message configuration

RTU mode is configured to start after idle time processing of more than 3.5 character transmissions and end after idle time processing of more than 3.5 character transmissions.

3.5 idle characters	Slave address	Function code	Data	Error check CRC-16	3.5 idle characters
	8-bit	8-bit	xx bits	16-bit	

Master judges the transmission complete after no command for 4-characters idle time and process the command.

*Transmission speed and judgment time to complete transmission

Transmission speed (bps)	Judgment time to complete (ms)
38,400	about 1
19,200	about 2
9,600	about 4
4,800	about 8
2,400	about 16
1,200	About 32

◇Slave address:

Slave address is an individual instrument number on the slave side and is set within the range 1 to 247 (01H to F7H) for Modbus communication. Master identifies slaves by the slave address of the requested message.

Slave informs master which slave is responding to master by placing its own address in the response message. Slave address 0 (00H, broadcast address) can identify all slaves connected. However slaves do not respond.

◇Function code: Function code is command code for the slave to undertake the following action types.

Function code	Contents
03(03H)	DT Read
06(06H)	DT1 word write
16(10H)	DT several data write

Function code is used to discern whether the response is normal (acknowledgement) or if any error (negative acknowledgement) has occurred when slave returns response message to master.

When acknowledgement is returned, slave simply returns original function code. When negative acknowledgement is returned, MSB of original function code is set as 1 for response.

For example, when the master sends request message setting 00H to function code by mistake, slave returns 80H by setting MSB to 1, because the former is an illegal function.

For negative acknowledgement, the exception codes below are set to data of response message and returned to master in order to inform it of what kind of error has occurred.

Exception code	Contents
1(01H)	Illegal Function (Non-existent function)
3(03H)	Illegal data value (Value out of the devise numbers)

note1) Even if it commands to write (06H.10H) to non-existent data address, slave response with acknowledgement. However, it doesn't write.

note2) Even if it commands to write the value out of the setting range, slave response with acknowledgement. However, it doesn't write.

note3) The maximum number of reading slaves is 26 (57-byte), the maximum number of writing slaves is 23 (55-byte).

◇Data: Data depends on the function code.
A request message from the master side is composed of data item, number of data and setting data.
A response message from the slave side is composed of number of bytes, data and exception code in negative acknowledgement.

◇Error check: 16-bit data to detect communication errors. Refer to the next.

◇Acknowledgement response
When command is to write 1 point, same massage of command is responded.
When command is to write several points, part of command message (6-byte) is responded.

◆Error check
After calculating CRC-16 (Cyclic Redundancy Check) from slave address to the end of data, the calculated 16-bit data is appended to the end of message in sequence from low order to high order.

<How to calculate CRC>
In CRC system, the information is divided by the polynomial series. The remainder is added to the end of the information and transmitted. The generation of polynomial series is as follows.
(Generation of polynomial series: $X^{16} + X^{15} + X^{2} + 1$)

1) Initialize the CRC-16 data (assumed as X) (FFFFH).
2) Calculate exclusive OR (XOR) with the 1st data and X. This is assumed as X.
3) Shift X one bit to the right. This is assumed as X.
4) When a carry is generated as a result of the shift, XOR is calculated by X of 3) and the fixed value (A001H). This is assumed as X. If a carry is not generated, go to step 5).
5) Repeat steps 3) and 4) until shifting 8 times.
6) XOR is calculated with the next data and X. This is assumed as X.
7) Repeat steps 3) to 5).
8) Repeat steps 3) to 5) up to the last data.
9) Set X as CRC-16 to the end of message in sequence from low order to high order.

◆Message example
<1> Reading conversion rate (P) (005DH) of address 1
・Command

3.5 idle characters	Slave address (01H)	Function code (03H)	Data item (005DH)	Number of data (0001H)	Error check CRC-16 (15D8H)	3.5 idle characters
	1	1	2	2	2	←character number

・Response message from slave in normal status (When Rate=1000(10.00) [03E8H])

3.5 idle characters	Slave address (01H)	Function code (03H)	Number of response byte (02H)	Number of data (03E8H)	Error check CRC-16 (B8FAH)	3.5 idle characters
	1	1	1	2	2	←character number

<2> Setting conversion rate (P) (005DH) of address 1 (When rate is set to 20.00(2000) [07D0H])
・Command

3.5 idle characters	Slave address (01H)	Function code (06H)	Data item (005DH)	Number of data (07D0H)	Error check CRC-16 (1BB4H)	3.5 idle characters
	1	1	2	2	2	←character number

・Response message from slave in normal status

3.5 idle characters	Slave address (01H)	Function code (06H)	Data item (005DH)	Number of data (07D0H)	Error check CRC-16 (1BB4H)	3.5 idle characters
	1	1	2	2	2	←character number

<3> Reset integral active power (0064H, 0065H: 2-word) of address 1

(When setting to 0 [0000, 0000H])

・Command

3.5 idle characters	Slave address (01H)	Function code (10H)	Data item (0064H)	Number of data item to write (0002H)	Number of data (04H)	⇒
	1	1	2	2	1	←character number

⇒

Data 1 (0000H)	Data 2 (0000H)	Error check CRC-16 (F474H)	3.5 idle characters
2	2	2	←character number

・Response message from slave in normal status

3.5 idle characters	Slave address (01H)	Function code (10H)	Data item (0064H)	Number of data item to write (0002H)	Error check CRC-16 (0017H)	3.5 idle characters
	1	1	2	2	2	←character number

・A response message from the slave in exception (error) status

(When number of data has been mistaken.)

Function code MSB is set to 1 for the response message in exception (error) status (90H).
The exception code 03H (Value out of the devise numbers) is returned as contents of error.

<Mistaken message example (Command)>

3.5 idle characters	Slave address (01H)	Function code (10H)	Number of data item to write (0002H)	Number of data ***(06H)***	⇒
				↑ **Mistake**	

⇒

Data 1 (0000H)	Data 2 (0000H)	Error check CRC-16 (8F8E)	3.5 idle characters

<Response message from slave to mistaken command
(Response message in exception (error) status)>

3.5 idle characters	Slave address (01H)	Function code (90H)	Exception code (03H)	Error check CRC-16 (0C01H)	3.5 idle characters

1.4.2 Data Register List (MODBUS communication)

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0002H	Over current (OFF threshold)	0.1%	Unsigned 16bit	1H to 4B0H	03H/ 06H/10H
0003H	Under voltage (OFF threshold)	0.1%	Unsigned 16bit	32H to 3E8H	03H/ 06H/10H
0004H	Over voltage (OFF threshold)	0.1%	Unsigned 16bit	3E8H to 4B0H	03H/ 06H/10H
0005H	Level output OUT1	—	Unsigned 16bit	0H:Pulse OFF,1H:Pulse ON	03H/ 06H/10H
0006H	Level output OUT2	—	Unsigned 16bit	0H:Pulse OFF,1H:Pulse ON	03H/ 06H/10H
0007H<LSB> 0008H<MSB>	Active power alarm (ON threshold) OUT1	0.1kW	Unsigned 32bit	0H to 1C9C37FH	03H/10H
0009H	Active power alarm target phaseOUT1	—	Unsigned 16bit	0H:All, 1H:Phase1, 2H:Phase2, 3H:Phase3, 5H:total	03H/ 06H/10H
000AH<LSB> 000BH<MSB>	Active power alarm (ON threshold) OUT2	0.1kW	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
000CH	Active power alarm target phase OUT2	—	Unsigned 16bit	0H:All, 1H:Phase1, 2H:Phase2, 3H:Phase3, 5H:total	03H/ 06H/10H
000DH	Stand-by alarm (threshold) OUT1	0.1%	Unsigned 16bit	1H to 3E8H	03H/ 06H/10H
000EH	Stand-by alarm (start time) OUT1	1min	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
000FH	Stand-by alarm (phase) OUT1	—	Unsigned 16bit	0H:All, 1H:Phase1, 2H:Phase2, 3H:Phase3	03H/ 06H/10H
0010H	Stand-by alarm (threshold)OUT2	0.1%	Unsigned 16bit	1H to 3E8H	03H/ 06H/10H
0011H	Stand-by alarm (start time) OUT2	1min	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
0012H	Stand-by alarm (phase) OUT2	—	Unsigned 16bit	0H:All, 1H:Phase1, 2H:Phase2, 3H:Phase3	03H/ 06H/10H
0013H<LSB> 0014H<MSB>	Preset OUT1	0.001	Unsigned 32bit	0H to F423FH	03H/10H
0015H<LSB> 0016H<MSB>	Preset OUT2	0.001	Unsigned 32bit	0H to F423FH	03H/10H
0017H	Integral power output target phase OUT1	—	Unsigned 16bit	1H:Phase1, 2H:Phase2, 3H:Phase3, 5H:total	03H/ 06H/10H
0018H	Integral power output target phase OUT2	—	Unsigned 16bit	1H:Phase1, 2H:Phase2, 3H:Phase3, 5H:total	03H/ 06H/10H
0019H	Time program 1 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H
001AH	Time program 1 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
001BH	Time program 2 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H
001CH	Time program 2 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
001DH	Time program 3 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H
001EH	Time program 3 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
001FH	Time program 4 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H
0020H	Time program 4 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
0021H	Time program 5 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H
0022H	Time program 5 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
0023H	Time program 6 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H
0024H	Time program 6 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
0025H	Time program 7 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0026H	Time program 7 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
0027H	Time program 8 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H
0028H	Time program 8 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
0029H	Time program 9 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H
002AH	Time program 9 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
002BH	Time program 10 (time-zone)	—	Unsigned 16bit	0H:OFF, 1H:T1, 2H:T2, 3H:T3, 4H:T4	03H/ 06H/10H
002CH	Time program 10 (start-time)	—	Unsigned 16bit	Higher Lower hh:00H to 23H, min,:00H to 59H	03H/ 06H/10H
002DH	Calendar(min,·ss)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H/ 06H/10H
002EH	Calendar(dd·hh)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H/ 06H/10H
002FH	Calendar(yy·mm)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H/ 06H/10H
0030H	Pulse input IN1	—	Unsigned 16bit	1H:30Hz, AH:Clock correction	03H/ 06H/10H
0031H	Pulse input IN2	—	Unsigned 16bit	1H:30Hz, 2H:2kHz	03H/ 06H/10H
0032H	RS485 Device number	—	Unsigned 16bit	Mewtocol: 1H to 64H Modbus: 1H to F7H DL/T645: 0H to 270FH	03H/ 06H/10H
0033H	RS485 Transmission speed	—	Unsigned 16bit	0H: 1200 1H: 2400 2H: 4800 3H: 9600 4H: 19200 5H: 38400	03H/ 06H/10H
0034H	RS485 Transmission format	—	Unsigned 16bit	0H: 8bit-o 1H: 8bit-n 2H: 8bit-E	03H/ 06H/10H
0035H	RS485 Stop bit	—	Unsigned 16bit	1H, 2H	03H/ 06H/10H
0036H	RS485 Response time	1ms	Unsigned 16bit	1H to 63H	03H/ 06H/10H
0037H	Phase/Wire	—	Unsigned 16bit	0H: 1P2W 1H: 1P3W 2H: 3P3W 3H: 3P4W	03H/ 06H/10H
0038H	CT type (2^{nd})	Rated A (rms)	Unsigned 16bit	1H, 5H	03H/ 06H/10H
0039H	Primary side current of CT	1A	Unsigned 16bit	1H to FFFFH	03H/ 06H/10H
003AH	VT ratio	0.01	Unsigned 16bit	64H to EA60H	03H/ 06H/10H
003BH	Temperature correction value	0.1℃	Signed 16bit	FC18H to 3E8H	03H/ 06H/10H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
003CH	Unit for pulse output OUT1	—	Unsigned 16bit	1H:0.0001kWh, 2H:0.001kWh, 3H:0.01kWh, 4H:0.1kWh, 5H:1kWh, 6H:10kWh, 7H:100kWh 64H:Stand-by alarm 65H:Under voltage alarm 66H:Over voltage alarm 67H:power interruption alarm 68H:Current alarm 69H:Active power alarm 6AH:Count output 1 6BH:Count output 2 6CH:Level output 6DH:PF alarm 6EH:current harmonics alarm 6FH:voltage harmonics alarm 70H:current THD alarm 71H:voltage THD alarm 72H:current unbalancing alarm 73H:voltage unbalancing alarm 74H:under current alarm 75H:reactive power alarm 76H:apparent power alarm 77H:over frequency alarm 78H:under frequency alarm 79H:power demand alarm 7AH:current demand alarm	03H/ 06H/10H
003DH	Unit for pulse output OUT2	—	Unsigned 16bit	1H:0.0001kWh, 2H:0.001kWh, 3H:0.01kWh, 4H:0.1kWh, 5H:1kWh, 6H:10kWh, 7H:100kWh 64H:Stand-by alarm 65H:Under voltage alarm 66H:Over voltage alarm 67H:power interruption alarm 68H:Current alarm 69H:Active power alarm 6AH:Count output 1 6BH:Count output 2 6CH:Level output 6DH:PF alarm 6EH:current harmonics alarm 6FH:voltage harmonics alarm 70H:current THD alarm 71H:voltage THD alarm 72H:current unbalancing alarm 73H:voltage unbalancing alarm 74H:under current alarm 75H:reactive power alarm 76H:apparent power alarm 77H:over frequency alarm 78H:under frequency alarm 79H:power demand alarm 7AH:current demand alarm	03H/ 06H/10H
003EH	Power interruption alarm target phase OUT1	—	Unsigned 16bit	0H:All, 1H:Phase1(line1-2), 2H:Phase2(line2-3), 3H:Phase3(line3-1)	03H/ 06H/10H
003FH	Power interruption alarmtarget phase OUT2	—	Unsigned 16bit	0H:All, 1H:Phase1(line1-2), 2H:Phase2(line2-3), 3H:Phase3(line3-1)	03H/ 06H/10H
0040H	Over current (ON threshold)	0.1%	Unsigned 16bit	1H to 4B0H	03H/ 06H/10H
0041H	Update cycle	100ms	Unsigned 16bit	1H to AH	03H/ 06H/10H
0042H<LSB> 0043H<MSB>	Prescale IN1	0.001	Unsigned 32bit	1H to 186A0H	03H/ 06H/10H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0044H<LSB> 0045H<MSB>	Prescale IN2	0.001	Unsigned 32bit	1H to 186A0H	03H/ 06H/10H
0046H	Auto-off	1min	Unsigned 16bit	0H to 63H (0H: always ON)	03H/ 06H/10H
0047H	Current alarm target phase OUT1	—	Unsigned 16bit	0H:All(except phaseN), 1H:Phase1, 2H:Phase2, 3H:Phase3, 4H:phaseN	03H/ 06H/10H
0048H	Current alarm target phase OUT2	—	Unsigned 16bit	0H:All(except phaseN), 1H:Phase1, 2H:Phase2, 3H:Phase3, 4H:phaseN	03H/ 06H/10H
0049H	Over voltage alarm target phase OUT1 *	—	Unsigned 16bit	0H:All, 1H:Phase1(line1-2), 2H:Phase2(line2-3), 3H:Phase3(line3-1) 6H:All-line 7H:Line 1-2 8H: Line 2-3 9H: Line 3-1	03H/ 06H/10H
004AH	Over voltage alarm target phase OUT2 *	—	Unsigned 16bit		03H/ 06H/10H
004BH	Under voltage alarm target phase OUT1 *	—	Unsigned 16bit		03H/ 06H/10H
004CH	Under voltage alarm target phase OUT2 *	—	Unsigned 16bit		03H/ 06H/10H
004DH	Integral direction OUT1	—	Unsigned 16bit	0H:export 1H:Integral active power (export)	03H/ 06H/10H
004EH	Integral direction OUT2	—	Unsigned 16bit	0H:export 1H:Integral active power (export)	03H/ 06H/10H
004FH	Clock correction	—	Unsigned 16bit	hh:0H to 23H min,:0H to 59H	03H/ 06H/10H
0050H	Over voltage (ON threshold)	0.1%	Unsigned 16bit	3E8H to 4B0H	03H/ 06H/10H
0051H	Under voltage (ON threshold)	0.1%	Unsigned 16bit	32H to 3E8H	03H/ 06H/10H
0052H	Blinking during alarm output	—	Unsigned 16bit	0H: no blinking, 1H:blinking	03H/ 06H/10H
0053H	Conversion rate(-P) T1	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
0054H	Conversion rate(-P) T2	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
0055H	Conversion rate(-P) T3	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
0056H	Conversion rate(-P) T4	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
0057H	Conversion rate (-P)	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
0058H	Rated voltage	1V	Unsigned 16bit	64H to 1F4H	03H/ 06H/10H
0059H	Conversion rate(P) T1	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
005AH	Conversion rate(P) T2	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
005BH	Conversion rate(P) T3	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
005CH	Conversion rate(P) T4	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
005DH	Conversion rate (P)	0.01	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
005EH	Password	—	Unsigned 16bit	0H to 270FH	03H/ 06H/10H
005FH	Auto display start	1min	Unsigned 16bit	0H to 63H (0H: fix display item)	03H/ 06H/10H
0060H	Display cycle	1sec	Unsigned 16bit	1H to 63H	03H/ 06H/10H
0061H	Luminance	—	Unsigned 16bit	1H to 5H	03H/ 06H/10H
0062H	Protocol	—	Unsigned 16bit	0H: MEWTOCOL, 1H: MODBUS, 2H: DL/T645	03H/ 06H/10H

* Select 0,1,2 or 3 for 3P3W and select 6,7,8 or 9 for 3P4W.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
7530H<LSB> 7531H<MSB>	Active power alarm (OFF threshold) OUT1	0.1kW	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
7532H<LSB> 7533H<MSB>	Active power alarm (OFF threshold) OUT2	0.1kW	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
7534H	PF alarm(ON threshold) OUT1	0.001	Unsigned 16bit	0H to 3E8H	03H/ 06H/10H
7535H	PF alarm (OFF threshold)OUT1	0.001	Unsigned 16bit	0H to 3E8H	03H/ 06H/10H
7536H	PF alarm(phase) OUT1	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
7537H	PF alarm(ON threshold) OUT2	0.001	Unsigned 16bit	0H to 3E8 H	03H/ 06H/10H
7538H	PF alarm (OFF threshold)OUT2	0.001	Unsigned 16bit	0H to 3E8 H	03H/ 06H/10H
7539H	PF alarm(phase) OUT2	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
753AH	Current harmonics alarm(ON threshold) OUT1	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
753BH	Current harmonics alarm(OFF threshold) OUT1	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
753CH	Current harmonics alarm(phase)OUT1	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
753DH	Current harmonics alarm(ON threshold) OUT2	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
753EH	Current harmonics alarm(OFF threshold) OUT2	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
753FH	Current harmonics alarm(phase)OUT2	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
7540H	Voltage harmonics alarm(ON threshold) OUT1	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
7541H	Voltage harmonics alarm(OFF threshold) OUT1	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
7542H	Voltage harmonics alarm(phase) OUT1 *	—	Unsigned 16bit	0H:All,1H:Phase1(line1-2), 2H:Phase2(line2-3), 3H:Phase3(line3-1) 6H:All-line 7H:Line 1-2 8H: Line 2-3 9H: Line 3-1	03H/ 06H/10H
7543H	Voltage harmonics alarm(ON threshold) OUT2	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
7544H	Voltage harmonics alarm(OFF threshold) OUT2	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
7545H	Voltage harmonics alarm(phase) OUT2 *	—	Unsigned 16bit	0H:All,1H:Phase1(line1-2), 2H:Phase2(line2-3), 3H:Phase3(line3-1) 6H:All-line 7H:Line 1-2 8H: Line 2-3 9H: Line 3-1	03H/ 06H/10H
7546H	Current THD alarm (ON threshold) OUT1	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
7547H	Current THD alarm (OFF threshold) OUT1	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
7548H	Current THD alarm (phase)OUT1	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H

* Select 0H,1H,2H or 3H for 3P3W and select 6H,7H,8H or 9H for 3P4W.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
7549H	Current THD alarm (ON threshold) OUT2	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
754AH	Current THD alarm (OFF threshold) OUT2	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
754BH	Current THD alarm (phase)OUT2	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
754CH	Voltage THD alarm (ON threshold) OUT1	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
754DH	Voltage THD alarm (OFF threshold) OUT1	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
754EH	Voltage THD alarm (phase)OUT1 *	—	Unsigned 16bit	0H:All,1H:Phase1(line1-2), 2H:Phase2(line2-3), 3H:Phase3(line3-1) 6H:All-line 7H:Line 1-2 8H: Line 2-3 9H: Line 3-1	03H/ 06H/10H
754FH	Voltage THD alarm (ON threshold) OUT2	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
7550H	Voltage THD alarm (OFF threshold) OUT2	0.01%	Unsigned 16bit	0H to 9C40H	03H/ 06H/10H
7551H	Voltage THD alarm (phase)OUT2 *	—	Unsigned 16bit	0H:All,1H:Phase1(line1-2), 2H:Phase2(line2-3), 3H:Phase3(line3-1) 6H:All-line 7H:Line 1-2 8H: Line 2-3 9H: Line 3-1	03H/ 06H/10H
7552H <LSB>	Current unbalancing alarm(ON threshold) OUT1	0.01%	Unsigned 32bit	0H to 1869FH	03H/ 06H/10H
7553H <MSB>					
7554H <LSB>	Current unbalancing alarm(OFF threshold) OUT1	0.01%	Unsigned 32bit	0H to 1869FH	03H/ 06H/10H
7555H <MSB>					
7556H <LSB>	Current unbalancing alarm(ON threshold) OUT2	0.01%	Unsigned 32bit	0H to 1869FH	03H/ 06H/10H
7557H <MSB>					
7558H <LSB>	Current unbalancing alarm(OFF threshold) OUT2	0.01%	Unsigned 32bit	0H to 1869FH	03H/ 06H/10H
7559H <MSB>					
755AH <LSB>	Voltage unbalancing alarm(ON threshold) OUT1	0.01%	Unsigned 32bit	0H to 1869FH	03H/ 06H/10H
755BH <MSB>					
755CH <LSB>	Voltage unbalancing alarm(OFF threshold) OUT1	0.01%	Unsigned 32bit	0H to 1869FH	03H/ 06H/10H
755DH <MSB>					
755EH <LSB>	Voltage unbalancing alarm(ON threshold) OUT2	0.01%	Unsigned 32bit	0H to 1869FH	03H/ 06H/10H
755FH <MSB>					
7560H <LSB>	Voltage unbalancing alarm(OFF threshold) OUT2	0.01%	Unsigned 32bit	0H to 1869FH	03H/ 06H/10H
7561H <MSB>					
7562H	Under current alarm (phase) OUT1	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
7563H	Under current alarm (phase) OUT2	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
7564H	Over frequency alarm (ON threshold) OUT1	0.01Hz	Unsigned 16bit	0H to 2710 H	03H/ 06H/10H
7565H	Over frequency alarm (OFF threshold)OUT1	0.01Hz	Unsigned 16bit	0H to 2710 H	03H/ 06H/10H
7566H	Over frequency alarm (phase) OUT1	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
7567H	Over frequency alarm (ON threshold) OUT2	0.01Hz	Unsigned 16bit	0H to 2710 H	03H/ 06H/10H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
7568H	Over frequency alarm (OFF threshold) OUT2	0.01Hz	Unsigned 16bit	0H to 2710 H	03H/ 06H/10H
7569H	Over frequency alarm (phase) OUT2	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
756AH	Under frequency alarm (ON threshold) OUT1	0.01Hz	Unsigned 16bit	0H to 2710 H	03H/ 06H/10H
756BH	Under frequency alarm (OFF threshold) OUT1	0.01Hz	Unsigned 16bit	0H to 2710 H	03H/ 06H/10H
756CH	Under frequency alarm (phase)OUT1	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
756DH	Under frequency alarm (ON threshold) OUT2	0.01Hz	Unsigned 16bit	0H to 2710 H	03H/ 06H/10H
756EH	Under frequency alarm (OFF threshold) OUT2	0.01Hz	Unsigned 16bit	0H to 2710 H	03H/ 06H/10H
756FH	Under frequency alarm (phase)OUT2	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
7570H <LSB> 7571H <MSB>	Reactive power alarm (ON threshold) OUT1	0.1kvar	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
7572H <LSB> 7573H <MSB>	Reactive power alarm (OFF threshold) OUT1	0.1kvar	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
7574H	Reactive power alarm (phase)OUT1	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3,5H:total	03H/ 06H/10H
7575H <LSB> 7576H <MSB>	Reactive power alarm (ON threshold) OUT2	0.1kvar	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
7577H <LSB> 7578H <MSB>	Reactive power alarm (OFF threshold) OUT2	0.1kvar	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
7579H	Reactive power alarm (phase)OUT2	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3,5H:total	03H/ 06H/10H
757AH <LSB> 757BH <MSB>	Apparent power alarm (ON threshold) OUT1	0.1kVA	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
757CH <LSB> 757DH <MSB>	Apparent power alarm (OFF threshold) OUT1	0.1kVA	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
757EH	Apparent power alarm (phase)OUT1	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3,5H:total	03H/ 06H/10H
757FH <LSB> 7580H <MSB>	Apparent power alarm (ON threshold) OUT2	0.1kVA	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
7581H <LSB> 7582H <MSB>	Apparent power alarm2 (OFF threshold) OUT2	0.1kVA	Unsigned 32bit	0H to 1C9C37FH	03H/ 06H/10H
7583H	Apparent power alarm (phase)OUT2	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3,5H:total	03H/ 06H/10H
7584H	Power demand alarm (power type) OUT1	—	Unsigned 16bit	0H:active power, 1H:reactive power, 2H:apparent power, 3H:active power (export) , 4H:reactive power (export)	03H/ 06H/10H
7585H <LSB> 7586H <MSB>	Power demand alarm (ON threshold) OUT1	0.001 kW /kvar/kVA	Unsigned 32bit	0H to 5F5E0FFH	03H/ 06H/10H
7587H <LSB> 7588H <MSB>	Power demand alarm (OFF threshold)OUT1	0.001 kW /kvar/kVA	Unsigned 32bit	0H to 5F5E0FFH	03H/ 06H/10H
7589H <LSB> 758AH <MSB>	Power demand alarm (target)OUT1	0.001 kW /kvar/kVA	Unsigned 32bit	0H to 5F5E0FFH	03H/ 06H/10H
758BH	Power demand alarm (hysteresis) OUT1	1%	Unsigned 16bit	0H to 64H	03H/ 06H/10H
758CH	Power demand alarm start-time OUT1	1min,	Unsigned 16bit	0H to 1EH	03H/ 06H/10H
758DH	Power demand alarm (power type) OUT2	—	Unsigned 16bit	0H:active power, 1H:reactive power, 2H:apparent power, 3H:active power (export) , 4H:reactive power (export)	03H/ 06H/10H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
758EH <LSB> 758FH <MSB>	Power demand alarm (ON threshold) OUT2	0.001 kW /kvar/kVA	Unsigned 32bit	0H to 5F5E0FFH	03H/ 06H/10H
7590H <LSB> 7591H <MSB>	Power demand alarm (OFF threshold) OUT2	0.001 kW /kvar/kVA	Unsigned 32bit	0H to 5F5E0FFH	03H/ 06H/10H
7592H <LSB> 7593H <MSB>	Power demand alarm (target) OUT2	0.001 kW /kvar/kVA	Unsigned 32bit	0H to 5F5E0FFH	03H/ 06H/10H
7594H	Power demand alarm (hysteresis) OUT2	1%	Unsigned 16bit	0H to 64H	03H/ 06H/10H
7595H	Power demand alarm start-timeOUT2	1min,	Unsigned 16bit	0H to 1EH	03H/ 06H/10H
7596H	Current demand alarm (ON threshold) OUT1	0.1%	Unsigned 16bit	0H to 4B0H	03H/ 06H/10H
7597H	Current demand alarm (OFF threshold) OUT1	0.1%	Unsigned 16bit	0H to 4B0H	03H/ 06H/10H
7598H	Current demand alarm (phase)OUT1	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
7599H	Current demand alarm (ON threshold) OUT2	0.1%	Unsigned 16bit	0H to 4B0H	03H/ 06H/10H
759AH	Current demand alarm (OFF threshold) OUT2	0.1%	Unsigned 16bit	0H to 4B0H	03H/ 06H/10H
759BH	Current demand alarm (phase)OUT2	—	Unsigned 16bit	0H:All,1H:Phase1, 2H:Phase2,3H:Phase3	03H/ 06H/10H
759CH	Power demand type	—	Unsigned 16bit	0H:peak demand, 1H:sliding block, 2H:fixed block, 3H:30-min demand	03H/ 06H/10H
759DH	Power demand interval1	1min	Unsigned 16bit	0H to 3CH	03H/ 06H/10H
759EH	Power demand interval2	1min	Unsigned 16bit	0H to 3CH	03H/ 06H/10H
759FH	Current demand interval	1min	Unsigned 16bit	0H to 3CH	03H/ 06H/10H
75A0H	30-min demandcalcuration method	—	Unsigned 16bit	0H:addition, 1H:average	03H/ 06H/10H
75A1H	Power input type	—	Unsigned 16bit	0H:CT input, 1H:pulse input	03H/ 06H/10H
75A2H	Pulse type	—	Unsigned 16bit	0H:kWh, 1H:Pulse	03H/ 06H/10H
75A3H <LSB> 75A4H <MSB>	Pulse rate (convert to electric power)	0.001 kWh	Unsigned 32bit	0H to 186A0H	03H/ 06H/10H
75A5H	Pulse constant value	pulse/kWh	Unsigned 16bit	0H:50000, 1H:2000	03H/ 06H/10H
75A6H	Under current (ON threshold)	0.1%	Unsigned 16bit	0H to 3E8H	03H/ 06H/10H
75A7H	Under current (OFF threshold)	0.1%	Unsigned 16bit	0H to 3E8H	03H/ 06H/10H
765CH	Reset all integral value	—	Unsigned 16bit	0H:No 1H:Yes	03H/ 06H/10H
765DH	Reset integral value 1	—	Unsigned 16bit	0H:No 1H:Yes	03H/ 06H/10H
765EH	Reset integral value 2	—	Unsigned 16bit	0H:No 1H:Yes	03H/ 06H/10H
765FH	Reset integral value 3	—	Unsigned 16bit	0H:No 1H:Yes	03H/ 06H/10H
7660H	Reset count value 1	—	Unsigned 16bit	0H:No 1H:Yes	03H/ 06H/10H
7661H	Reset count value 2	—	Unsigned 16bit	0H:No 1H:Yes	03H/ 06H/10H
7662H	Reset log data	—	Unsigned 16bit	0H:No 1H:Yes	03H/ 06H/10H
7663H	Cut off current	0.1%	Unsigned 16bit	1H to 1F4H	03H/ 06H/10H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0064H <LSB> 0065H <MSB>	Integral active power (1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0066H <LSB> 0067H <MSB>	Integral active power (2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0068H <LSB> 0069H <MSB>	Integral active power (3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
006AH <LSB> 006BH <MSB>	Total integral active power	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
006CH <LSB> 006DH <MSB>	Integral reactive power (1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
006EH <LSB> 006FH <MSB>	Integral reactive power (2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0070H <LSB> 0071H <MSB>	Integral reactive power (3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0072H <LSB> 0073H <MSB>	Total integral reactive power	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
0074H <LSB> 0075H <MSB>	Integral apparent power (1)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0076H <LSB> 0077H <MSB>	Integral apparent power (2)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0078H <LSB> 0079H <MSB>	Integral apparent power (3)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
007AH <LSB> 007BH <MSB>	Total integral apparent power	0.01kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
007CH <LSB> 007DH <MSB>	Integral export active power (1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
007EH <LSB> 007FH <MSB>	Integral export active power (2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0080H <LSB> 0081H <MSB>	Integral export active power (3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0082H <LSB> 0083H <MSB>	Total integral export active power	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
0084H <LSB> 0085H <MSB>	Integral export reactive power (1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0086H <LSB> 0087H <MSB>	Integral export reactive power (2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0088H <LSB> 0089H <MSB>	Integral export reactive power (3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
008AH <LSB> 008BH <MSB>	Total integral export reactive power	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H

* ’Range’ is not the measurement range, it shows the data range.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
008CH <LSB> 008DH <MSB>	Instantaneous active power (1)	0.01kW	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
008EH <LSB> 008FH <MSB>	Instantaneous active power (2)	0.01kW	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
0090H <LSB> 0091H <MSB>	Instantaneous active power (3)	0.01kW	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
0092H <LSB> 0093H <MSB>	Total instantaneous active power	0.01kW	Signed 32bit	EE1E5D03H to 11E1A2FDH	03H
0094H <LSB> 0095H <MSB>	Instantaneous reactive power (1)	0.01kvar	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
0096H <LSB> 0097H <MSB>	Instantaneous reactive power (2)	0.01kvar	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
0098H <LSB> 0099H <MSB>	Instantaneous reactive power (3)	0.01kvar	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
009AH <LSB> 009BH <MSB>	Total instantaneous reactive power	0.01kvar	Signed 32bit	EE1E5D03H to 11E1A2FDH	03H
009CH <LSB> 009DH <MSB>	Instantaneous apparent power (1)	0.01kVA	Unsigned 32bit	0H to 5F5E0FFH	03H
009EH <LSB> 009FH <MSB>	Instantaneous apparent power (2)	0.01kVA	Unsigned 32bit	0H to 5F5E0FFH	03H
00A0H <LSB> 00A1H <MSB>	Instantaneous apparent power (3)	0.01kVA	Unsigned 32bit	0H to 5F5E0FFH	03H
00A2H <LSB> 00A3H <MSB>	Total instantaneous apparent power	0.01kVA	Unsigned 32bit	0H to 11E1A2FDH	03H
00A4H <LSB> 00A5H <MSB>	Voltage 1	0.1V	Unsigned 32bit	0H to 3B9AC9FFH	03H
00A6H <LSB> 00A7H <MSB>	Voltage 2	0.1V	Unsigned 32bit	0H to 3B9AC9FFH	03H
00A8H <LSB> 00A9H <MSB>	Voltage 3	0.1V	Unsigned 32bit	0H to 3B9AC9FFH	03H
00AAH <LSB> 00ABH <MSB>	Voltage average	0.1V	Unsigned 32bit	0H to 3B9AC9FFH	03H
00ACH <LSB> 00ADH <MSB>	Line voltage 1-2	0.1V	Unsigned 32bit	0H to 3B9AC9FFH	03H
00AEH <LSB> 00AFH <MSB>	Line voltage 2-3	0.1V	Unsigned 32bit	0H to 3B9AC9FFH	03H
00B0H <LSB> 00B1H <MSB>	Line voltage 3-1	0.1V	Unsigned 32bit	0H to 3B9AC9FFH	03H
00B2H <LSB> 00B3H <MSB>	Line voltage average	0.1V	Unsigned 32bit	0H to 3B9AC9FFH	03H
00B4H <LSB> 00B5H <MSB>	Current (1)	0.01A	Unsigned 32bit	0H to 3B9AC9FFH	03H
00B6H <LSB> 00B7H <MSB>	Current (2)	0.01A	Unsigned 32bit	0H to 3B9AC9FFH	03H
00B8H <LSB> 00B9H <MSB>	Current (3)	0.01A	Unsigned 32bit	0H to 3B9AC9FFH	03H
00BAH<LSB> 00BBH<MSB>	Current phaseN	0.01A	Unsigned 32bit	0H to 3B9AC9FFH	03H
00BCH <LSB> 00BDH <MSB>	Current average	0.01A	Unsigned 32bit	0H to 3B9AC9FFH	03H
00BEH	Frequency (1)	0.1Hz	Unsigned 16bit	0H to 3E7H	03H
00BFH	Frequency (2)	0.1Hz	Unsigned 16bit	0H to 3E7H	03H
00C0H	Frequency (3)	0.1Hz	Unsigned 16bit	0H to 3E7H	03H
00C1H	Frequency average	0.1Hz	Unsigned 16bit	0H to 3E7H	03H
00C2H	PF (1)	0.001	Signed 16bit	FC18H to 3E8H	03H
00C3H	PF (2)	0.001	Signed 16bit	FC18H to 3E8H	03H
00C4H	PF (3)	0.001	Signed 16bit	FC18H to 3E8H	03H
00C5H	PF average	0.001	Signed 16bit	FC18H to 3E8H	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
00C6H <LSB> 00C7H <MSB>	Integral active power (1)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00C8H <LSB> 00C9H <MSB>	Integral active power (2)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00CAH <LSB> 00CBH <MSB>	Integral active power (3)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00CCH <LSB> 00CDH <MSB>	Total integral active power	0.001 kWh	Unsigned 32bit	0H to B2D05DFDH	03H
00CEH <LSB> 00CFH <MSB>	Integral reactive power (1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00D0H <LSB> 00D1H <MSB>	Integral reactive power (2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00D2H <LSB> 00D3H <MSB>	Integral reactive power (3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00D4H <LSB> 00D5H <MSB>	Total integral reactive power	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
00D6H <LSB> 00D7H <MSB>	Integral apparent power (1)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00D8H <LSB> 00D9H <MSB>	Integral apparent power (2)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00DAH <LSB> 00DBH <MSB>	Integral apparent power (3)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00DCH <LSB> 00DDH <MSB>	Total integral apparent power	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
00DEH <LSB> 00DFH <MSB>	Integral export active power (1)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00E0H <LSB> 00E1H <MSB>	Integral export active power (2)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00E2H <LSB> 00E3H <MSB>	Integral export active power (3)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00E4H <LSB> 00E5H <MSB>	Total integral export active power	0.001 kWh	Unsigned 32bit	0H to B2D05DFDH	03H
00E6H <LSB> 00E7H <MSB>	Integral export reactive power (1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00E8H <LSB> 00E9H <MSB>	Integral export reactive power (2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00EAH <LSB> 00EBH <MSB>	Integral export reactive power (3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
00ECH <LSB> 00EDH <MSB>	Total integral export reactive power	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
00EEH <LSB> 00EFH <MSB>	Instantaneous active power (1)	0.001 kW	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
00F0H <LSB> 00F1H <MSB>	Instantaneous active power (2)	0.001 kW	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
00F2H <LSB> 00F3H <MSB>	Instantaneous active power (3)	0.001 kW	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
00F4H <LSB> 00F5H <MSB>	Total instantaneous active power	0.001 kW	Signed 32bit	EE1E5D03H to 11E1A2FDH	03H
00F6H <LSB> 00F7H <MSB>	Instantaneous reactive power (1)	0.001 kvar	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
00F8H <LSB> 00F9H <MSB>	Instantaneous reactive power (2)	0.001 kvar	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
00FAH <LSB> 00FBH <MSB>	Instantaneous reactive power (3)	0.001 kvar	Signed 32bit	FA0A1F01H to 5F5E0FFH	03H
00FCH <LSB> 00FDH <MSB>	Total instantaneous reactive power	0.001 kvar	Signed 32bit	EE1E5D03H to 11E1A2FDH	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
00FEH <LSB> 00FFH <MSB>	Instantaneous apparent power (1)	0.001 kVA	Unsigned 32bit	0H to 5F5E0FFH	03H
0100H <LSB> 0101H <MSB>	Instantaneous apparent power (2)	0.001 kVA	Unsigned 32bit	0H to 5F5E0FFH	03H
0102H <LSB> 0103H <MSB>	Instantaneous apparent power (3)	0.001 kVA	Unsigned 32bit	0H to 5F5E0FFH	03H
0104H <LSB> 0105H <MSB>	Total instantaneous apparent power	0.001 kVA	Unsigned 32bit	0H to 11E1A2FDH	03H
0106H <LSB> 0107H <MSB>	Voltage 1	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
0108H <LSB> 0109H <MSB>	Voltage 2	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
010AH <LSB> 010BH <MSB>	Voltage 3	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
010CH <LSB> 010DH <MSB>	Voltage average	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
010EH <LSB> 010FH <MSB>	Line voltage 1-2	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
0110H <LSB> 0111H <MSB>	Line voltage 2-3	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
0112H <LSB> 0113H <MSB>	Line voltage 3-1	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
0114H <LSB> 0115H <MSB>	Line voltage average	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
0116H <LSB> 0117H <MSB>	Current (1)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
0118H <LSB> 0119H <MSB>	Current (2)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
011AH <LSB> 011BH <MSB>	Current (3)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
011CH<LSB> 011DH<MSB>	CurrentphaseN	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
011EH <LSB> 011FH <MSB>	Current average	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
0120H	Frequency (1)	0.01Hz	Unsigned 16bit	0H to 2710H	03H
0121H	Frequency (2)	0.01Hz	Unsigned 16bit	0H to 2710H	03H
0122H	Frequency (3)	0.01Hz	Unsigned 16bit	0H to 2710H	03H
0123H	Frequency average	0.01Hz	Unsigned 16bit	0H to 2710H	03H

* 'Range' is not the measurement range, it shows the data range.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0124H<LSB> 0125H<MSB>	Pulse input value IN1	—	Unsigned 32bit	0H to F423FH	03H/10H
0126H<LSB> 0127H<MSB>	Pulse input value IN2	—	Unsigned 32bit	0H to F423FH	03H/10H
0128H	Pulse inputIN1status	—	Unsigned 16bit	0H:OFF, 1H:ON	03H
0129H	Pulse inputIN2status	—	Unsigned 16bit	0H:OFF, 1H:ON	03H
012AH	Pulse outputOUT1status	—	Unsigned 16bit	0H:OFF, 1H:ON	03H
012BH	Pulse outputOUT2status	—	Unsigned 16bit	0H:OFF, 1H:ON	03H
012CH<LSB> 012DH<MSB>	Integral active power (pulse conversion value)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
012EH<LSB> 012FH<MSB>	Estimated demand	0.001kW	Unsigned 32bit	0H to 5F5E0FFH	03H
0130H	Demand remaining time	1min,	Unsigned 16bit	0H to 1EH	03H
0131H<LSB> 0132H<MSB>	Present demand (active power)	0.001kW	Unsigned 32bit	0H to 5F5E0FFH	03H
0133H<LSB> 0134H<MSB>	Present demand (reactive power)	0.001kvar	Unsigned 32bit	0H to 5F5E0FFH	03H
0135H<LSB> 0136H<MSB>	Present demand (apparent power)	0.001kVA	Unsigned 32bit	0H to 5F5E0FFH	03H
0137H<LSB> 0138H<MSB>	Present demand (active power (export))	0.001kW	Unsigned 32bit	0H to 5F5E0FFH	03H
0139H<LSB> 013AH<MSB>	Present demand (reactive power (export))	0.001kvar	Unsigned 32bit	0H to 5F5E0FFH	03H
013BH<LSB> 013CH<MSB>	Present demand (current①)	0.001A	Unsigned 32bit	0H to 5F5E0FFH	03H
013DH<LSB> 013EH<MSB>	Present demand (current②)	0.001A	Unsigned 32bit	0H to 5F5E0FFH	03H
013FH<LSB> 0140H<MSB>	Present demand (current③)	0.001A	Unsigned 32bit	0H to 5F5E0FFH	03H
0144H	PF status	-	Unsigned 16bit	0H: even, 1H: Lag, 2H: Lead	03H
0145H<LSB> 0146H<MSB>	Total integral active power	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0147H<LSB> 0148H<MSB>	Total integral reactive power	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0149H<LSB> 014AH<MSB>	Total integral apparent power	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
014BH<LSB> 014CH<MSB>	Total integral export active power	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
014DH<LSB> 014EH<MSB>	Total integral export reactive power	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
014FH<LSB> 0150H<MSB>	Total integral active power	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0151H<LSB> 0152H<MSB>	Total integral reactive power	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0153H<LSB> 0154H<MSB>	Total integral apparent power	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0155H<LSB> 0156H<MSB>	Total integral export active power	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0157H<LSB> 0158H<MSB>	Total integral export reactive power	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
01A2H	Temperature	0.1℃	Signed 16bit	FC18H to 3E8H	03H
01F4H<LSB> 01F5H<MSB>	Integral active power①(T1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
01F6H<LSB> 01F7H<MSB>	Integral active power②(T1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
01F8H<LSB> 01F9H<MSB>	Integral active power③(T1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
01FAH<LSB> 01FBH<MSB>	Total integral active power(T1)	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
01FCH<LSB> 01FDH<MSB>	Integral active power①(T2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
01FEH<LSB> 01FFH<MSB>	Integral active power②(T2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0200H<LSB> 0201H<MSB>	Integral active power③(T2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0202H<LSB> 0203H<MSB>	Total integral active power(T2)	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
0204H<LSB> 0205H<MSB>	Integral active power①(T3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0206H<LSB> 0207H<MSB>	Integral active power②(T3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0208H<LSB> 0209H<MSB>	Integral active power③(T3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
020AH<LSB> 020BH<MSB>	Total integral active power(T3)	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
020CH<LSB> 020DH<MSB>	Integral active power①(T4)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
020EH<LSB> 020FH<MSB>	Integral active power②(T4)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0210H<LSB> 0211H<MSB>	Integral active power③(T4)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0212H<LSB> 0213H<MSB>	Total integral active power(T4)	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
0214H<LSB> 0215H<MSB>	Integral reactive power①(T1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0216H<LSB> 0217H<MSB>	Integral reactive power②(T1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0218H<LSB> 0219H<MSB>	Integral reactive power③(T1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
021AH<LSB> 021BH<MSB>	Total integral reactive power(T1)	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
021CH<LSB> 021DH<MSB>	Integral reactive power①(T2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
021EH<LSB> 021FH<MSB>	Integral reactive power②(T2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0220H<LSB> 0221H<MSB>	Integral reactive power③(T2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0222H<LSB> 0223H<MSB>	Total integral reactive power(T2)	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0224H<LSB> 0225H<MSB>	Integral reactive power①(T3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0226H<LSB> 0227H<MSB>	Integral reactive power②(T3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0228H<LSB> 0229H<MSB>	Integral reactive power③(T3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
022AH<LSB> 022BH<MSB>	Total integral reactive power(T3)	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
022CH<LSB> 022DH<MSB>	Integral reactive power①(T4)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
022EH<LSB> 022FH<MSB>	Integral reactive power②(T4)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0230H<LSB> 0231H<MSB>	Integral reactive power③(T4)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0232H<LSB> 0233H<MSB>	Total integral reactive power(T4)	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
0234H<LSB> 0235H<MSB>	Integral apparent power①(T1)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0236H<LSB> 0237H<MSB>	Integral apparent power②(T1)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0238H<LSB> 0239H<MSB>	Integral apparent power③(T1)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
023AH<LSB> 023BH<MSB>	Total integral apparent power(T1)	0.01kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
023CH<LSB> 023DH<MSB>	Integral apparent power①(T2)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
023EH<LSB> 023FH<MSB>	Integral apparent power②(T2)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0240H<LSB> 0241H<MSB>	Integral apparent power③(T2)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0242H<LSB> 0243H<MSB>	Total integral apparent power(T2)	0.01kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
0244H<LSB> 0245H<MSB>	Integral apparent power①(T3)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0246H<LSB> 0247H<MSB>	Integral apparent power②(T3)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0248H<LSB> 0249H<MSB>	Integral apparent power③(T3)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
024AH<LSB> 024BH<MSB>	Total integral apparent power(T3)	0.01kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
024CH<LSB> 024DH<MSB>	Integral apparent power①(T4)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
024EH<LSB> 024FH<MSB>	Integral apparent power②(T4)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0250H<LSB> 0251H<MSB>	Integral apparent power③(T4)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0252H<LSB> 0253H<MSB>	Tota integral apparent power(T4)	0.01kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
0254H<LSB> 0255H<MSB>	Integral active power (export) ① (T1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0256H<LSB> 0257H<MSB>	Integral active power (export) ② (T1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0258H<LSB> 0259H<MSB>	Integral active power (export) ③ (T1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
025AH<LSB> 025BH<MSB>	Total integral active power (export) (T1)	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
025CH<LSB> 025DH<MSB>	Integral active power (export) ① (T2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
025EH<LSB> 025FH<MSB>	Integral active power (export) ② (T2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0260H<LSB> 0261H<MSB>	Integral active power (export) ③ (T2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0262H<LSB> 0263H<MSB>	Total integral active power (export) (T2)	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
0264H<LSB> 0265H<MSB>	Integral active power (export) ① (T3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0266H<LSB> 0267H<MSB>	Integral active power (export) ② (T3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0268H<LSB> 0269H<MSB>	Integral active power (export) ③ (T3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
026AH<LSB> 026BH<MSB>	Total integral active power (export) (T3)	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
026CH<LSB> 026DH<MSB>	Integral active power (export) ① (T4)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
026EH<LSB> 026FH<MSB>	Integral active power (export) ② (T4)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0270H<LSB> 0271H<MSB>	Integral active power (export) ③ (T4)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0272H<LSB> 0273H<MSB>	Total integral active power (export) (T4)	0.01kWh	Unsigned 32bit	0H to B2D05DFDH	03H
0274H<LSB> 0275H<MSB>	Integral reactive power (export) ① (T1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0276H<LSB> 0277H<MSB>	Integral reactive power (export) ② (T1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0278H<LSB> 0279H<MSB>	Integral reactive power (export) ③ (T1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
027AH<LSB> 027BH<MSB>	Total integral reactive power (export) (T1)	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
027CH<LSB> 027DH<MSB>	Integral reactive power (export) ① (T2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
027EH<LSB> 027FH<MSB>	Integral reactive power (export) ② (T2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0280H<LSB> 0281H<MSB>	Integral reactive power (export) ③ (T2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0282H<LSB> 0283H<MSB>	Total integral reactive power (export) (T2)	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0284H<LSB> 0285H<MSB>	Integral reactive power (export) ①(T3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0286H<LSB> 0287H<MSB>	Integral reactive power (export) ②(T3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0288H<LSB> 0289H<MSB>	Integral reactive power (export) ③(T3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
028AH<LSB> 028BH<MSB>	Total Integral reactive power (export) (T3)	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
028CH<LSB> 028DH<MSB>	Integral reactive power (export) ①(T4)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
028EH<LSB> 028FH<MSB>	Integral reactive power (export) ②(T4)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0290H<LSB> 0291H<MSB>	Integral reactive power (export) ③(T4)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0292H<LSB> 0293H<MSB>	Total Integral reactive power (export) (T4)	0.01kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
0294H<LSB> 0295H<MSB>	Voltage unbalancing	0.001%	Unsigned 32bit	0H to F423FH	03H
0296H<LSB> 0297H<MSB>	Current unbalancing	0.001%	Unsigned 32bit	0H to F423FH	03H
0298H<LSB> 0299H<MSB>	Phase voltage THD①	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
029AH<LSB> 029BH<MSB>	Phase voltage THD②	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
029CH<LSB> 029DH<MSB>	Phase voltage THD③	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
029EH<LSB> 029FH<MSB>	Phase voltage THD average	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02A0H<LSB> 02A1H<MSB>	Line voltage THD 1-2	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02A2H<LSB> 02A3H<MSB>	Line voltage THD 2-3	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02A4H<LSB> 02A5H<MSB>	Line voltage THD 3-1	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02A6H<LSB> 02A7H<MSB>	Line voltage THD average	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02A8H<LSB> 02A9H<MSB>	Current THD①	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02AAH<LSB> 02ABH<MSB>	Current THD②	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02ACH<LSB> 02ADH<MSB>	Current THD③	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02AEH<LSB> 02AFH<MSB>	Current THD average	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
02B0H +8*(n-2) <LSB>	Phase voltage n-order harmonics ①	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02B0H +8*(n-2) + 1 <MSB>					
02B0H +8*(n-2) + 2 <LSB>	Phase voltage n-order harmonics ②	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02B0H +8*(n-2) + 3 <MSB>					
02B0H +8*(n-2) + 4 <LSB>	Phase voltage n-order harmonics ③	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02B0H +8*(n-2) + 5 <MSB>					
02B0H +8*(n-2) + 6 <LSB>	Phase voltage n-order harmonics average	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
02B0H +8*(n-2) + 7 <MSB>					
03A8H +8*(n-2) <LSB>	Line voltage n-order Harmonics1-2	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
03A8H +8*(n-2) + 1 <MSB>					
03A8H +8*(n-2) + 2 <LSB>	Line voltage n-order Harmonics2-3	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
03A8H +8*(n-2) + 3 <MSB>					
03A8H +8*(n-2) + 4 <LSB>	Line voltage n-order Harmonics3-1	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
03A8H +8*(n-2) + 5 <MSB>					
03A8H +8*(n-2) + 6 <LSB>	Line voltage n-order harmonics average	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
03A8H +8*(n-2) + 7 <MSB>					
04A0H +8*(n-2) <LSB>	Current n-order harmonics ①	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
04A0H +8*(n-2) + 1 <MSB>					
04A0H +8*(n-2) + 2 <LSB>	Current n-order harmonics ②	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
04A0H +8*(n-2) + 3 <MSB>					
04A0H +8*(n-2) + 4 <LSB>	Current n-order harmonics ③	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
04A0H +8*(n-2) + 5 <MSB>					
04A0H +8*(n-2) + 6 <LSB>	Current n-order harmonics average	0.001%	Signed 32bit	FFF9E580H to 61A80H	03H
04A0H +8*(n-2) + 7 <MSB>					
0590H<LSB>	Integral active power①(T1)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0591H<MSB>					
0592H<LSB>	Integral active power②(T1)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0593H<MSB>					
0594H<LSB>	Integral active power③(T1)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0595H<MSB>					
0596H<LSB>	Totalintegral active power(T1)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
0597H<MSB>					
0598H<LSB>	Integral active power①(T2)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0599H<MSB>					
059AH<LSB>	Integral active power②(T2)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
059BH<MSB>					
059CH<LSB>	Integral active power③(T2)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
059EH<LSB>	Total integral active power(T2)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
059FH<MSB>					

* n shows 2 to 31(2H to 1FH).

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
05A0H<LSB> 05A1H<MSB>	Integral active power①(T3)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05A2H<LSB> 05A3H<MSB>	Integral active power②(T3)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05A4H<LSB> 05A5H<MSB>	Integral active power③(T3)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05A6H<LSB> 05A7H<MSB>	Totalintegral active power(T3)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
05A8H<LSB> 05A9H<MSB>	Integral active power①(T4)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05AAH<LSB> 05ABH<MSB>	Integral active power②(T4)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05ACH<LSB> 05ADH<MSB>	Integral active power③(T4)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05AEH<LSB> 05AFH<MSB>	Totalintegral active power(T4)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
05B0H<LSB> 05B1H<MSB>	Integral reactive power①(T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05B2H<LSB> 05B3H<MSB>	Integral reactive power②(T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05B4H<LSB> 05B5H<MSB>	Integral reactive power③(T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05B6H<LSB> 05B7H<MSB>	Totalintegral reactive power(T1)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
05B8H<LSB> 05B9H<MSB>	Integral reactive power①(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05BAH<LSB> 05BBH<MSB>	Integral reactive power②(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05BCH<LSB> 05BDH<MSB>	Integral reactive power③(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05BEH<LSB> 05BFH<MSB>	Totalintegral reactive power(T2)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
05C0H<LSB> 05C1H<MSB>	Integral reactive power①(T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05C2H<LSB> 05C3H<MSB>	Integral reactive power②(T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05C4H<LSB> 05C5H<MSB>	Integral reactive power③(T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05C6H<LSB> 05C7H<MSB>	Totalintegral reactive power(T3)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
05C8H<LSB> 05C9H<MSB>	Integral reactive power①(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05CAH<LSB> 05CBH<MSB>	Integral reactive power②(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05CCH<LSB> 05CDH<MSB>	Integral reactive power③(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05CEH<LSB> 05CFH<MSB>	Totalintegral reactive power(T4)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
05D0H<LSB> 05D1H<MSB>	Integral apparent power①(T1)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05D2H<LSB> 05D3H<MSB>	Integral apparent power②(T1)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05D4H<LSB> 05D5H<MSB>	Integral apparent power③(T1)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05D6H<LSB> 05D7H<MSB>	Totalintegral apparent power(T1)	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
05D8H<LSB> 05D9H<MSB>	Integral apparent power①(T2)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05DAH<LSB> 05DBH<MSB>	Integral apparent power②(T2)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
05DCH<LSB> 05DDH<MSB>	Integral apparent power③(T2)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05DEH<LSB> 05DFH<MSB>	Totalintegral apparent power (T2)	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
05E0H<LSB> 05E1H<MSB>	Integral apparent power①(T3)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05E2H<LSB> 05E3H<MSB>	Integral apparent power②(T3)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05E4H<LSB> 05E5H<MSB>	Integral apparent power③(T3)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05E6H<LSB> 05E7H<MSB>	Totalintegral apparent power(T3)	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
05E8H<LSB> 05E9H<MSB>	Integral apparent power①(T4)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05EAH<LSB> 05EBH<MSB>	Integral apparent power②(T4)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05ECH<LSB> 05EDH<MSB>	Integral apparent power③(T4)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05EEH<LSB> 05EFH<MSB>	Totalintegral apparent power(T4)	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
05F0H<LSB> 05F1H<MSB>	Integral active power (export) ①(T1)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05F2H<LSB> 05F3H<MSB>	Integral active power (export) ②(T1)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05F4H<LSB> 05F5H<MSB>	Integral active power (export) ③(T1)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05F6H<LSB> 05F7H<MSB>	Total integral active power (export) (T1)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
05F8H<LSB> 05F9H<MSB>	Integral active power (export) ①(T2)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05FAH<LSB> 05FBH<MSB>	Integral active power (export) ②(T2)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05FCH<LSB> 05FDH<MSB>	Integral active power (export) ③(T2)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
05FEH<LSB> 05FFH<MSB>	Total integral active power (export) (T2)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
0600H<LSB> 0601H<MSB>	Integral active power (export) ①(T3)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0602H<LSB> 0603H<MSB>	Integral active power (export) ②(T3)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0604H<LSB> 0605H<MSB>	Integral active power (export) ③(T3)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0606H<LSB> 0607H<MSB>	Total integral active power (export) (T3)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
0608H<LSB> 0609H<MSB>	Integral active power (export) ①(T4)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
060AH<LSB> 060BH<MSB>	Integral active power (export) ②(T4)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
060CH<LSB> 060DH<MSB>	Integral active power (export) ③(T4)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
060EH<LSB> 060FH<MSB>	Total integral active power (export) (T4)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
0610H<LSB> 0611H<MSB>	Integral reactive power (export) ①(T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0612H<LSB> 0613H<MSB>	Integral reactive power (export) ②(T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0614H<LSB> 0615H<MSB>	Integral reactive power (export) ③(T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0616H<LSB> 0617H<MSB>	Total integral reactive power (export) (T1)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0618H<LSB> 0619H<MSB>	Integral reactive power (export) ①(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
061AH<LSB> 061BH<MSB>	Integral reactive power (export) ②(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
061CH<LSB> 061DH<MSB>	Integral reactive power (export) ③(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
061EH<LSB> 061FH<MSB>	Total integral reactive power (export) (T2)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
0620H<LSB> 0621H<MSB>	Integral reactive power (export) ①(T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0622H<LSB> 0623H<MSB>	Integral reactive power (export) ②(T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0624H<LSB> 0625H<MSB>	Integral reactive power (export) ③(T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
0626H<LSB> 0627H<MSB>	Total integral reactive power (export) (T3)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
0628H<LSB> 0629H<MSB>	Integral reactive power (export) ①(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
062AH<LSB> 062BH<MSB>	Integral reactive power (export) ②(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
062CH<LSB> 062DH<MSB>	Integral reactive power (export) ③(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H/10H
062EH<LSB> 062FH<MSB>	Total integral reactive power (export) (T4)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
0640H<LSB> 0641H<MSB>	Total integral active power(T1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0642H<LSB> 0643H<MSB>	Total integral active power(T2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0644H<LSB> 0645H<MSB>	Total integral active power(T3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0646H<LSB> 0647H<MSB>	Total integral active power(T4)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0648H<LSB> 0649H<MSB>	Totalintegral reactive power(T1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
064AH<LSB> 064BH<MSB>	Totalintegral reactive power(T2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
064CH<LSB> 064DH<MSB>	Totalintegral reactive power(T3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
064EH<LSB> 064FH<MSB>	Totalintegral reactive power(T4)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0650H<LSB> 0651H<MSB>	Totalintegral apparent power(T1)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0652H<LSB> 0653H<MSB>	Totalintegral apparent power(T2)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0654H<LSB> 0655H<MSB>	Totalintegral apparent power(T3)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0656H<LSB> 0657H<MSB>	Totalintegral apparent power(T4)	0.01kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0658H<LSB> 0659H<MSB>	Total integral active power (export) (T1)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
065AH<LSB> 065BH<MSB>	Total integral active power (export) (T2)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
065CH<LSB> 065DH<MSB>	Total integral active power (export) (T3)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
065EH<LSB> 065FH<MSB>	Total integral active power (export) (T4)	0.01kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
0660H<LSB> 0661H<MSB>	Total integral reactive power (export) (T1)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0662H<LSB> 0663H<MSB>	Total integral reactive power (export) (T2)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0664H<LSB> 0665H<MSB>	Total integral reactive power (export) (T3)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0666H<LSB> 0667H<MSB>	Total integral reactive power (export) (T4)	0.01kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0668H<LSB> 0669H<MSB>	Total integral active power(T1)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
066AH<LSB> 066BH<MSB>	Total integral active power(T2)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
066CH<LSB> 066DH<MSB>	Total integral active power(T3)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
066EH<LSB> 066FH<MSB>	Total integral active power(T4)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0670H<LSB> 0671H<MSB>	Totalintegral reactive power(T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0672H<LSB> 0673H<MSB>	Totalintegral reactive power(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0674H<LSB> 0675H<MSB>	Totalintegral reactive power(T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0676H<LSB> 0677H<MSB>	Totalintegral reactive power(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0678H<LSB> 0679H<MSB>	Totalintegral apparent power(T1)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
067AH<LSB> 067BH<MSB>	Totalintegral apparent power(T2)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
067CH<LSB> 067DH<MSB>	Totalintegral apparent power(T3)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
067EH<LSB> 067FH<MSB>	Total integral apparent power(T4)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0680H<LSB> 0681H<MSB>	Total integral active power (export) (T1)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0682H<LSB> 0683H<MSB>	Total integral active power (export) (T2)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0684H<LSB> 0685H<MSB>	Total integral active power (export) (T3)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0686H<LSB> 0687H<MSB>	Total integral active power (export) (T4)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
0688H<LSB> 0689H<MSB>	Total integral reactive power (export) (T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
068AH<LSB> 068BH<MSB>	Total integral reactive power (export) (T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
068CH<LSB> 068DH<MSB>	Total integral reactive power (export) (T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
068EH<LSB> 068FH<MSB>	Total integral reactive power (export) (T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
1390H<LSB> 1391H<MSB>	Export power conversion value ①(T1)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
1392H<LSB> 1393H<MSB>	Export power conversion value ②(T1)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
1394H<LSB> 1395H<MSB>	Export power conversion value ③(T1)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
1396H<LSB> 1397H<MSB>	Total Export power conversion value (T1)	0.01	Unsigned 32bit	0H to B2D05DFDH	03H
1398H<LSB> 1399H<MSB>	Export power conversion value ①(T2)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
139AH<LSB> 139BH<MSB>	Export power conversion value ②(T2)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
139CH<LSB> 139DH<MSB>	Export power conversion value ③(T2)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
139EH<LSB> 139FH<MSB>	Total export power conversion value (T2)	0.01	Unsigned 32bit	0H to B2D05DFDH	03H
13A0H<LSB> 13A1H<MSB>	Export power conversion value ①(T3)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13A2H<LSB> 13A3H<MSB>	Export power conversion value ②(T3)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13A4H<LSB> 13A5H<MSB>	Export power conversion value ③(T3)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13A6H<LSB> 13A7H<MSB>	Total export power conversion value (T3)	0.01	Unsigned 32bit	0H to B2D05DFDH	03H
13A8H<LSB> 13A9H<MSB>	Export power conversion value ①(T4)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13AAH<LSB> 13ABH<MSB>	Export power conversion value ②(T4)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13ACH<LSB> 13ADH<MSB>	Export power conversion value ③(T4)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13AEH<LSB> 13AFH<MSB>	TotalExport power conversion value (T4)	0.01	Unsigned 32bit	0H to B2D05DFDH	03H
13B0H <LSB> 13B1H <MSB>	Export power Conversion value (1)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13B2H <LSB> 13B3H <MSB>	Export power conversion value (2)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
13B4H <LSB> 13B5H <MSB>	Export power conversion value (3)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13B6H <LSB> 13B7H <MSB>	Total export power conversion value	0.01	Unsigned 32bit	0H to B2D05DFDH	03H
13C2H<LSB> 13C3H<MSB>	Import power conversion value ① (T1)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13C4H<LSB> 13C5H<MSB>	Import power conversion value ② (T1)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13C6H<LSB> 13C7H<MSB>	Import power conversion value ③ (T1)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13C8H<LSB> 13C9H<MSB>	TotalImport power conversion value (T1)	0.01	Unsigned 32bit	0H to B2D05DFDH	03H
13CAH<LSB> 13CBH<MSB>	Import power conversion value ① (T2)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13CCH<LSB> 13CDH<MSB>	Import power conversion value ② (T2)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13CEH<LSB> 13CFH<MSB>	Import power conversion value ③ (T2)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13D0H<LSB> 13D1H<MSB>	Total import power conversion value (T2)	0.01	Unsigned 32bit	0H to B2D05DFDH	03H
13D2H<LSB> 13D3H<MSB>	Import power conversion value ① (T3)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13D4H<LSB> 13D5H<MSB>	Import power conversion value ② (T3)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13D6H<LSB> 13D7H<MSB>	Import power conversion value ③ (T3)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13D8H<LSB> 13D9H<MSB>	Total import power conversion value (T3)	0.01	Unsigned 32bit	0H to B2D05DFDH	03H
13DAH<LSB> 13DBH<MSB>	Import power conversion value ① (T4)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13DCH<LSB> 13DDH<MSB>	Import power conversion value ② (T4)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13DEH<LSB> 13DFH<MSB>	Import power conversion value ③ (T4)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13E0H<LSB> 13E1H<MSB>	Total import power conversion value (T4)	0.01	Unsigned 32bit	0H to B2D05DFDH	03H
13E2H <LSB> 13E3H <MSB>	Conversion value (1)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13E4H <LSB> 13E5H <MSB>	Conversion value (2)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13E6H <LSB> 13E7H <MSB>	Conversion value (3)	0.01	Unsigned 32bit	0H to 3B9AC9FFH	03H
13E8H <LSB> 13E9H <MSB>	Total conversion value	0.01	Unsigned 32bit	0H to B2D05DFDH	03H

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
2710H + 19H*(MM-1)	Monthly max. demand date active power(T1)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, min,:01H to 12H	03H
2710H + 19H*(MM-1)+1	Monthly max. demand time active power(T1)	—	Unsigned 16bit	Higher Lower dd: 01H to 31H, hh: 00H to 23H	03H
2710H + 19H*(MM-1)+2	Monthly max. demand time active power(T1)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2710H + 19H*(MM-1)+3 <LSB> 2710H + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power(T1)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
2715H + 19H*(MM-1)	Monthly max. demand date active power(T2)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2715H + 19H*(MM-1)+1	Monthly max. demand time active power(T2)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2715H + 19H*(MM-1)+2	Monthly max. demand time active power(T2)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2715H + 19H*(MM-1)+3 <LSB> 2715H + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power(T2)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
271AH + 19H*(MM-1)	Monthly max. demand date active power(T3)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
271AH + 19H*(MM-1)+1	Monthly max. demand time active power(T3)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
271AH + 19H*(MM-1)+2	Monthly max. demand time active power(T3)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
271AH + 19H*(MM-1)+3 <LSB> 271AH + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power(T3)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
271FH + 19H*(MM-1)	Monthly max. demand date active power(T4)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
271FH + 19H*(MM-1)+1	Monthly max. demand time active power(T4)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
271FH + 19H*(MM-1)+2	Monthly max. demand time active power(T4)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
271FH + 19H*(MM-1)+3 <LSB> 271FH + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power(T4)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
2724H + 19H*(MM-1)	Monthly max. demand date active power(T)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2724H + 19H*(MM-1)+1	Monthly max. demand time active power(T)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2724H + 19H*(MM-1)+2	Monthly max. demand time active power(T)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
2724H+ 19H*(MM-1)+3 <LSB> 2724H + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power(T)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
283CH + 19H*(MM-1)	Monthly max. demand date reactive power (T1)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
283CH + 19H*(MM-1)+1	Monthly max. demand time reactive power (T1)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
283CH + 19H*(MM-1)+2	Monthly max. demand time reactive power (T1)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
283CH + 19H*(MM-1)+3 <LSB> 283CH + 19H*(MM-1)+4 <MSB>	Monthly max.demand reactive power(T1)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
2841H + 19H*(MM-1)	Monthly max. demand date reactive power(T2)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2841H + 19H*(MM-1)+1	Monthly max. demand time reactive power(T2)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2841H + 19H*(MM-1)+2	Monthly max. demand time reactive power(T2)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2841H + 19H*(MM-1)+3 <LSB> 2841H + 19H*(MM-1)+4 <MSB>	Monthly max.demand reactive power(T2)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
2846H + 19H*(MM-1)	Monthly max. demand date reactive power(T3)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2846H + 19H*(MM-1)+1	Monthly max. demand time reactive power(T3)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2846H + 19H*(MM-1)+2	Monthly max. demand time reactive power(T3)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2846H + 19H*(MM-1)+3 <LSB> 2846H + 19H*(MM-1)+4 <MSB>	Monthly max.demand reactive power(T3)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
284BH + 19H*(MM-1)	Monthly max. demand date reactive power(T4)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
284BH + 19H*(MM-1)+1	Monthly max. demand time reactive power(T4)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
284BH + 19H*(MM-1)+2	Monthly max. demand time reactive power(T4)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
284BH + 19H*(MM-1)+3 <LSB> 284BH + 19H*(MM-1)+4 <MSB>	Monthly max.demand reactive power(T4)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
2850H + 19H*(MM-1)	Monthly max. demand date reactive power(T)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2850H + 19H*(MM-1)+1	Monthly max. demand time reactive power(T)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2850H + 19H*(MM-1)+2	Monthly max. demand time reactive power(T)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2850H + 19H*(MM-1)+3 <LSB> 2850H + 19H*(MM-1)+4 <MSB>	Monthly max.demand reactive power(T)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
2968H + 19H*(MM-1)	Monthly max. demand date apparent power(T1)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2968H + 19H*(MM-1)+1	Monthly max. demand time apparent power(T1)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2968H + 19H*(MM-1)+2	Monthly max. demand time apparent power(T1)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2968H + 19H*(MM-1)+3 <LSB> 2968H + 19H*(MM-1)+4 <MSB>	Monthly max.demand apparent power(T1)	0.001kVA	Unsigned 32bit	0H to B2D05DFDH	03H
296DH + 19H*(MM-1)	Monthly max. demand date apparent power(T2)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
296DH + 19H*(MM-1)+1	Monthly max. demand time apparent power(T2)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
296DH + 19H*(MM-1)+2	Monthly max. demand time apparent power(T2)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
296DH + 19H*(MM-1)+3 <LSB> 296DH + 19H*(MM-1)+4 <MSB>	Monthly max.demand apparent power(T2)	0.001kVA	Unsigned 32bit	0H to B2D05DFDH	03H
2972H + 19H*(MM-1)	Monthly max. demand date apparent power(T3)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2972H + 19H*(MM-1)+1	Monthly max. demand time apparent power(T3)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2972H + 19H*(MM-1)+2	Monthly max. demand time apparent power(T3)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2972H + 19H*(MM-1)+3 <LSB> 2972H + 19H*(MM-1)+4 <MSB>	Monthly max.demand apparent power(T3)	0.001kVA	Unsigned 32bit	0H to B2D05DFDH	03H
2977H + 19H*(MM-1)	Monthly max. demand date apparent power(T4)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2977H + 19H*(MM-1)+1	Monthly max. demand time apparent power(T4)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2977H + 19H*(MM-1)+2	Monthly max. demand time apparent power(T4)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
2977H + 19H*(MM-1)+3 <LSB> 2977H + 19H*(MM-1)+4 <MSB>	Monthly max.demand apparent power(T4)	0.001kVA	Unsigned 32bit	0H to B2D05DFDH	03H
297CH + 19H*(MM-1)	Monthly max. demand date apparent power(T)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
297CH + 19H*(MM-1)+1	Monthly max. demand time apparent power(T)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
297CH + 19H*(MM-1)+2	Monthly max. demand time apparent power(T)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
297CH + 19H*(MM-1)+3 <LSB> 297CH + 19H*(MM-1)+4 <MSB>	Monthly max.demand apparent power(T)	0.001kVA	Unsigned 32bit	0H to B2D05DFDH	03H
2A94H + 19H*(MM-1)	Monthly max. demand date active power (export) (T1)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2A94H + 19H*(MM-1)+1	Monthly max. demand active power (export) (T1)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2A94H + 19H*(MM-1)+2	Monthly max. demand time active power (export) (T1)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2A94H + 19H*(MM-1)+3 <LSB> 2A94H + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power(export) (T1)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
2A99H + 19H*(MM-1)	Monthly max. demand date active power (export) (T2)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2A99H + 19H*(MM-1)+1	Monthly max. demand time active power (export) (T2)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2A99H + 19H*(MM-1)+2	Monthly max. demand time active power (export) (T2)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2A99H + 19H*(MM-1)+3 <LSB> 2A99H + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power (export) (T2)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
2A9EH + 19H*(MM-1)	Monthly max. demand date active power (export) (T3)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2A9EH + 19H*(MM-1)+1	Monthly max. demand time active power (export) (T3)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2A9EH + 19H*(MM-1)+2	Monthly max. demand time active power (export) (T3)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2A9EH + 19H*(MM-1)+3 <LSB> 2A9EH + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power (export) (T3)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
2AA3H + 19H*(MM-1)	Monthly max. demand date active power (export) (T4)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2AA3H + 19H*(MM-1)+1	Monthly max. demand time active power (export) (T4)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2AA3H + 19H*(MM-1)+2	Monthly max. demand time active power (export) (T4)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2AA3H + 19H*(MM-1)+3 <LSB> 2AA3H + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power (export) (T4)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
2AA8H + 19H*(MM-1)	Monthly max. demand date active power (export) (T)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2AA8H + 19H*(MM-1)+1	Monthly max. demand time active power (export) (T)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2AA8H + 19H*(MM-1)+2	Monthly max. demand time active power (export) (T)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2AA8H + 19H*(MM-1)+3 <LSB> 2AA8H + 19H*(MM-1)+4 <MSB>	Monthly max.demand active power (export) (T)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
2BC0H + 19H*(MM-1)	Monthly max. demand date reactive power (export) (T1)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2BC0H + 19H*(MM-1)+1	Monthly max. demand time reactive power (export) (T1)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2BC0H + 19H*(MM-1)+2	Monthly max. demand time reactive power (export) (T1)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2BC0H + 19H*(MM-1)+3 <LSB> 2BC0H + 19H*(MM-1)+4 <MSB>	Monthly max.demand reactive power (export) (T1)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
2BC5H + 19H*(MM-1)	Monthly max. demand date reactive power (export) (T2)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2BC5H + 19H*(MM-1)+1	Monthly max. demand time reactive power (export) (T2)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2BC5H + 19H*(MM-1)+2	Monthly max. demand time reactive power (export) (T2)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2BC5H + 19H*(MM-1)+3 <LSB> 2BC5H + 19H*(MM-1)+4 <MSB>	Monthly max.demand reactive power (export) (T2)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
2BCAH + 19H*(MM-1)	Monthly max. demand date reactive power (export) (T3)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2BCAH + 19H*(MM-1)+1	Monthly max. demand time reactive power (export) (T3)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2BCAH + 19H*(MM-1)+2	Monthly max. demand time reactive power (export) (T3)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
2BCAH + 19H*(MM-1)+3 <LSB> 2BCAH + 19H*(MM-1)+4 <MSB>	Monthly max.demand reactive power (export) (T3)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
2BCFH + 19H*(MM-1)	Monthly max. demand date reactive power (export) (T4)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2BCFH + 19H*(MM-1)+1	Monthly max. demand time reactive power (export) (T4)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2BCFH + 19H*(MM-1)+2	Monthly max. demand time reactive power (export) (T4)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2BCFH + 19H*(MM-1)+3 <LSB> 2BCFH + 19H*(MM-1)+4 <MSB>	Monthly max.demand reactive power (export) (T4)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
2BD4H + 19H*(MM-1)	Monthly max. demand date reactive power (export) (T)	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2BD4H + 19H*(MM-1)+1	Monthly max. demand time reactive power (export) (T)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2BD4H + 19H*(MM-1)+2	Monthly max. demand time reactive power (export) (T)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2BD4H + 19H*(MM-1)+3 <LSB> 2BD4H + 75*(MM-1)+4 <MSB>	Monthly max.demand reactive power (export) (T)	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
2CECH+ 28H*(MM-1)	Monthly max. date Instantaneous active power①	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2CECH + 28H*(MM-1)+1	Monthly max. time Instantaneous active power①	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2CECH + 28H*(MM-1)+2	Monthly max. time instantaneous active power①	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2CECH + 28H*(MM-1)+3 <LSB> 2CECH + 28H*(MM-1)+4 <MSB>	Monthly max. instantaneous active power①	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H
2CF1H + 28H*(MM-1)	Monthly max. date instantaneous active power②	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2CF1H + 28H*(MM-1)+1	Monthly max. time instantaneous active power②	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2CF1H + 28H*(MM-1)+2	Monthly max. time instantaneous active power②	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2CF1H + 28H*(MM-1)+3 <LSB> 2CF1H + 28H*(MM-1)+4 <MSB>	Monthly max. instantaneous active power②	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
2CF6H + 28H*(MM-1)	Monthly max. date instantaneous active power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2CF6H + 28H*(MM-1)+1	Monthly max. time instantaneous active power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2CF6H + 28H*(MM-1)+2	Monthly max. time instantaneous active power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2CF6H + 28H*(MM-1)+3 <LSB> 2CF6H + 28H*(MM-1)+4 <MSB>	Monthly max. instantaneous active power③	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H
2CFBH + 28H*(MM-1)	Monthly max. date totalinstantaneous active power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2CFBH + 28H*(MM-1)+1	Monthly max. time totalinstantaneous active power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2CFBH + 28H*(MM-1)+2	Monthly max. time totalinstantaneous active power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2CFBH + 28H*(MM-1)+3 <LSB> 2CFBH + 28H*(MM-1)+4 <MSB>	Monthly max. totalinstantaneous active power	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
2D00H + 28H*(MM-1)	Monthly min. date instantaneous active power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2D00H + 28H*(MM-1)+1	Monthly min. time instantaneous active power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2D00H + 28H*(MM-1)+2	Monthly min. time instantaneous active power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2D00H + 28H*(MM-1)+3 <LSB> 2D00H + 28H*(MM-1)+4 <MSB>	Monthly min. instantaneous active power①	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H
2D05H + 28H*(MM-1)	Monthly min. date instantaneous active power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2D05H + 28H*(MM-1)+1	Monthly min. time Instantaneous active power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2D05H + 28H*(MM-1)+2	Monthly min. time Instantaneous active power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2D05H + 28H*(MM-1)+3 <LSB> 2D05H + 28H*(MM-1)+4 <MSB>	Monthly min. Instantaneous active power②	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H
2D0AH + 28H*(MM-1)	Monthly min. date instantaneous active power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2D0AH + 28H*(MM-1)+1	Monthly min. time instantaneous active power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2D0AH + 28H*(MM-1)+2	Monthly min. time instantaneous active power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
2D0AH + 28H*(MM-1)+3 <LSB> 2D0AH + 28H*(MM-1)+4 <MSB>	Monthly min. instantaneous active power③	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H
2D0FH + 28H*(MM-1)	Monthly min. date Total instantaneous Active power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2D0FH + 28H*(MM-1)+1	Monthly min. time Total instantaneous Active power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2D0FH + 28H*(MM-1)+2	Monthly min. time Total instantaneous Active power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2D0FH + 28H*(MM-1)+3 <LSB> 2D0FH + 28H*(MM-1)+4 <MSB>	Monthly min. Total instantaneous Active power	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
2ECCH + 28H*(MM-1)	Monthly max. date reactive power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2ECCH + 28H*(MM-1)+1	Monthly max. time reactive power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2ECCH + 28H*(MM-1)+2	Monthly max. time reactive power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2ECCH + 28H*(MM-1)+3 <LSB> 2ECCH + 28H*(MM-1)+4 <MSB>	Monthly max. reactive power①	0.001kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
2ED1H + 28H*(MM-1)	Monthly max. date reactive power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2ED1H + 28H*(MM-1)+1	Monthly max. time reactive power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2ED1H + 28H*(MM-1)+2	Monthly max. time reactive power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2ED1H + 28H*(MM-1)+3 <LSB> 2ED1H + 28H*(MM-1)+4 <MSB>	Monthly max. reactive power②	0.001kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
2ED6H + 28H*(MM-1)	Monthly max. date reactive power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2ED6H + 28H*(MM-1)+1	Monthly max. time reactive power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2ED6H + 28H*(MM-1)+2	Monthly max. time reactive power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2ED6H + 28H*(MM-1)+3 <LSB> 2ED6H + 28H*(MM-1)+4 <MSB>	Monthly max. reactive power③	0.001kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
2EDBH + 28H*(MM-1)	Monthly max. date total reactive power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2EDBH + 28H*(MM-1)+1	Monthly max. time total reactive power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2EDBH + 28H*(MM-1)+2	Monthly max. time total reactive power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2EDBH + 28H*(MM-1)+3 <LSB> 2EDBH + 28H*(MM-1)+4 <MSB>	Monthly max. total reactive power	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H
2EE0H+ 28H*(MM-1)	Monthly min. date reactive power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2EE0H + 28H*(MM-1)+1	Monthly min. time reactive power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2EE0H + 28H*(MM-1)+2	Monthly min. time reactive power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2EE0H + 28H*(MM-1)+3 <LSB> 2EE0H + 28H*(MM-1)+4 <MSB>	Monthly min. reactive power①	0.001kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
2EE5H + 28H*(MM-1)	Monthly min. date reactive power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2EE5H + 28H*(MM-1)+1	Monthly min. time reactive power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2EE5H + 28H*(MM-1)+2	Monthly min. time reactive power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2EE5H + 28H*(MM-1)+3 <LSB> 2EE5H + 28H*(MM-1)+4 <MSB>	Monthly min. reactive power②	0.001kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
2EEAH + 28H*(MM-1)	Monthly min. date reactive power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2EEAH + 28H*(MM-1)+1	Monthly min. time reactive power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2EEAH + 28H*(MM-1)+2	Monthly min. time reactive power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2EEAH + 28H*(MM-1)+3 <LSB> 2EEAH + 28H*(MM-1)+4 <MSB>	Monthly min. reactive power③	0.001kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
2EEFH + 28H*(MM-1)	Monthly min. date total reactive power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
2EEFH + 28H*(MM-1)+1	Monthly min. time total reactive power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
2EEFH + 28H*(MM-1)+2	Monthly min. time total reactive power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
2EEFH + 28H*(MM-1)+3 <LSB> 2EEFH + 28H*(MM-1)+4 <MSB>	Monthly min. total reactive power	0.001kvar	Unsigned 32bit	0H to B2D05DFDH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
30ACH+ 28H*(MM-1)	Monthly max. date apparent power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
30ACH + 28H*(MM-1)+1	Monthly max. time apparent power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
30ACH + 28H*(MM-1)+2	Monthly max. time apparent power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
30ACH + 28H*(MM-1)+3 <LSB> 30ACH + 28H*(MM-1)+4 <MSB>	Monthly max. apparent power①	0.001kVA	Unsigned 32bit	0H to 3B9AC9FFH	03H
30B1H + 28H*(MM-1)	Monthly max. date apparent power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
30B1H + 28H*(MM-1)+1	Monthly max. time apparent power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
30B1H + 28H*(MM-1)+2	Monthly max. time apparent power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
30B1H + 28H*(MM-1)+3 <LSB> 30B1H + 28H*(MM-1)+4 <MSB>	Monthly max. apparent power②	0.001kVA	Unsigned 32bit	0H to 3B9AC9FFH	03H
30B6H + 28H*(MM-1)	Monthly max. date apparent power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
30B6H + 28H*(MM-1)+1	Monthly max. time apparent power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
30B6H + 28H*(MM-1)+2	Monthly max. time apparent power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
30B6H + 28H*(MM-1)+3 <LSB> 30B6H + 28H*(MM-1)+4 <MSB>	Monthly max. apparent power③	0.001kVA	Unsigned 32bit	0H to 3B9AC9FFH	03H
30BBH + 28H*(MM-1)	Monthly max. date total apparent power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
30BBH + 28H*(MM-1)+1	Monthly max. time total apparent power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
30BBH + 28H*(MM-1)+2	Monthly max. time total apparent power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
30BBH + 28H*(MM-1)+3 <LSB> 30BBH + 28H*(MM-1)+4 <MSB>	Monthly max. total apparent power	0.001kVA	Unsigned 32bit	0H to B2D05DFDH	03H
30C0H + 28H*(MM-1)	Monthly min. date apparent power①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
30C0H + 28H*(MM-1)+1	Monthly min. time apparent power①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
30C0H + 28H*(MM-1)+2	Monthly min. time apparent power①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
30C0H + 28H*(MM-1)+3 <LSB> 30C0H + 28H*(MM-1)+4 <MSB>	Monthly min. apparent power①	0.001kVA	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
30C5H + 28H*(MM-1)	Monthly min. date apparent power②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
30C5H + 28H*(MM-1)+1	Monthly min. time apparent power②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
30C5H + 28H*(MM-1)+2	Monthly min. time apparent power②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
30C5H + 28H*(MM-1)+3 <LSB> 30C5H + 28H*(MM-1)+4 <MSB>	Monthly min. apparent power②	0.001kVA	Unsigned 32bit	0H to 3B9AC9FFH	03H
30CAH + 28H*(MM-1)	Monthly min. date apparent power③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
30CAH + 28H*(MM-1)+1	Monthly min. time apparent power③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
30CAH + 28H*(MM-1)+2	Monthly min. time apparent power③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
30CAH + 28H*(MM-1)+3 <LSB> 30CAH + 28H*(MM-1)+4 <MSB>	Monthly min. apparent power③	0.001kVA	Unsigned 32bit	0H to 3B9AC9FFH	03H
30CFH + 28H*(MM-1)	Monthly min. date total apparent power	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
30CFH + 28H*(MM-1)+1	Monthly min. time total apparent power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
30CFH + 28H*(MM-1)+2	Monthly min. time total apparent power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
30CFH + 28H*(MM-1)+3 <LSB> 30CFH + 28H*(MM-1)+4 <MSB>	Monthly min. total apparent power	0.001 kVA	Unsigned 32bit	0H to B2D05DFDH	03H
328CH+ 28H*(MM-1)	Monthly max. date active power (export) ①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
328CH + 28H*(MM-1)+1	Monthly max. time active power (export) ①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
328CH + 28H*(MM-1)+2	Monthly max. time active power (export) ①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
328CH + 28H*(MM-1)+3 <LSB> 328CH + 28H*(MM-1)+4 <MSB>	Monthly max. active power (export) ①	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H
3291H + 28H*(MM-1)	Monthly max. date active power (export) ②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3291H + 28H*(MM-1)+1	Monthly max. time active power (export) ②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3291H + 28H*(MM-1)+2	Monthly max. time active power (export) ②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3291H + 28H*(MM-1)+3 <LSB> 3291H + 28H*(MM-1)+4 <MSB>	Monthly max. active power (export) ②	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
3296H + 28H*(MM-1)	Monthly max. date active power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3296H + 28H*(MM-1)+1	Monthly max. time active power (export) ③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3296H + 28H*(MM-1)+2	Monthly max. time active power (export) ③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3296H + 28H*(MM-1)+3 <LSB> 3296H + 28H*(MM-1)+4 <MSB>	Monthly max. active power (export) ③	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H
329BH + 28H*(MM-1)	Monthly max. date totalactive power (export)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
329BH + 28H*(MM-1)+1	Monthly max. time totalactive power (export)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
329BH + 28H*(MM-1)+2	Monthly max. time totalactive power (export)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
329BH + 28H*(MM-1)+3 <LSB> 329BH + 28H*(MM-1)+4 <MSB>	Monthly max. totalactive power (export)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
32A0H + 28H*(MM-1)	Monthly min. date active power (export) ①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32A0H + 28H*(MM-1)+1	Monthly min. time active power (export) ①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32A0H + 28H*(MM-1)+2	Monthly min. time active power (export) ①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32A0H + 28H*(MM-1)+3 <LSB> 32A0H + 28H*(MM-1)+4 <MSB>	Monthly min. active power (export) ①	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H
32A5H + 28H*(MM-1)	Monthly min. date active power (export) ②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32A5H + 28H*(MM-1)+1	Monthly min. time active power (export) ②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32A5H + 28H*(MM-1)+2	Monthly min. time active power (export) ②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32A5H + 28H*(MM-1)+3 <LSB> 32A5H + 28H*(MM-1)+4 <MSB>	Monthly min. active power (export) ②	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H
32AAH + 28H*(MM-1)	Monthly min. date active power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32AAH + 28H*(MM-1)+1	Monthly min. time active power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32AAH + 28H*(MM-1)+2	Monthly min. time active power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32AAH + 28H*(MM-1)+3 <LSB> 32AAH + 28H*(MM-1)+4 <MSB>	Monthly min. active power (export) ③	0.001kW	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
32AFH + 28H*(MM-1)	Monthly min. date totalactive power (export)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
32AFH + 28H*(MM-1)+1	Monthly min. time totalactive power (export)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
32AFH + 28H*(MM-1)+2	Monthly min. time totalactive power (export)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
32AFH + 28H*(MM-1)+3 <LSB> 32AFH + 28H*(MM-1)+4 <MSB>	Monthly min. totalactive power (export)	0.001kW	Unsigned 32bit	0H to B2D05DFDH	03H
346CH + 28H*(MM-1)	Monthly max. date reactive power (export) ①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
346CH + 28H*(MM-1)+1	Monthly max. time reactive power (export) ①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
346CH + 28H*(MM-1)+2	Monthly max. time reactive power (export) ①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
346CH + 28H*(MM-1)+3 <LSB> 346CH + 28H*(MM-1)+4 <MSB>	Monthly max. reactive power (export) ①	0.001 kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
3471H + 28H*(MM-1)	Monthly max. date reactive power (export) ②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3471H + 28H*(MM-1)+1	Monthly max. time reactive power (export) ②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3471H + 28H*(MM-1)+2	Monthly max. time reactive power (export) ②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3471H + 28H*(MM-1)+3 <LSB> 3471H + 28H*(MM-1)+4 <MSB>	Monthly max. reactive power (export) ②	0.001 kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
3476H + 28H*(MM-1)	Monthly max. date reactive power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3476H + 28H*(MM-1)+1	Monthly max. time reactive power (export) ③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3476H + 28H*(MM-1)+2	Monthly max. time reactive power (export) ③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3476H + 28H*(MM-1)+3 <LSB> 3476H + 28H*(MM-1)+4 <MSB>	Monthly max. reactive power (export) ③	0.001 kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
347BH + 28H*(MM-1)	Monthly max. date totalreactive power (export)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
347BH + 28H*(MM-1)+1	Monthly max. time totalreactive power (export)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
347BH + 28H*(MM-1)+2	Monthly max. time totalreactive power (export)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
347BH + 28H*(MM-1)+3 <LSB> 347BH + 28H*(MM-1)+4 <MSB>	Monthly max. totalreactive power (export)	0.001 kvar	Unsigned 32bit	0H to B2D05DFDH	03H

*MM means '1H to CH' for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
3480H + 28H*(MM-1)	Monthly min. date reactive power (export) ①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3480H + 28H*(MM-1)+1	Monthly min. time reactive power (export) ①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3480H + 28H*(MM-1)+2	Monthly min. time reactive power (export) ①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3480H + 28H*(MM-1)+3 <LSB> 3480H + 28H*(MM-1)+4 <MSB>	Monthly min. reactive power (export) ①	0.001 kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
3485H + 28H*(MM-1)	Monthly min. date reactive power (export) ②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3485H + 28H*(MM-1)+1	Monthly min. time reactive power (export) ②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3485H + 28H*(MM-1)+2	Monthly min. time reactive power (export) ②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3485H + 28H*(MM-1)+3 <LSB> 3485H + 28H*(MM-1)+4 <MSB>	Monthly min. reactive power (export) ②	0.001 kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
348AH + 28H*(MM-1)	Monthly min. date reactive power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
348AH + 28H*(MM-1)+1	Monthly min. time reactive power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
348AH + 28H*(MM-1)+2	Monthly min. time reactive power (export) ③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
348AH + 28H*(MM-1)+3 <LSB> 348AH + 28H*(MM-1)+4 <MSB>	Monthly min. reactive power (export) ③	0.001 kvar	Unsigned 32bit	0H to 3B9AC9FFH	03H
348FH + 28H*(MM-1)	Monthly min. date Total reactive power (export)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
348FH + 28H*(MM-1)+1	Monthly min. time Total reactive power (export)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
348FH + 28H*(MM-1)+2	Monthly min. time Total reactive power (export)	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
348FH + 28H*(MM-1)+3 <LSB> 348FH + 28H*(MM-1)+4 <MSB>	Monthly min. Total reactive power (export)	0.001 kvar	Unsigned 32bit	0H to B2D05DFDH	03H
364CH + 32H*(MM-1)	Monthly max. date current①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
364CH + 32H*(MM-1)+1	Monthly max. time current①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
364CH + 32H*(MM-1)+2	Monthly max. time current①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
364CH + 32H*(MM-1)+3 <LSB> 364CH + 32H*(MM-1)+4 <MSB>	Monthly max. current①	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
3651H+ 32H*(MM-1)	Monthly max. date current②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3651H + 32H*(MM-1)+1	Monthly max. time current②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3651H + 32H*(MM-1)+2	Monthly max. time current②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3651H + 32H*(MM-1)+3 <LSB> / 3651H + 32H*(MM-1)+4 <MSB>	Monthly max. current②	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
3656H + 32H*(MM-1)	Monthly max. date current③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3656H + 32H*(MM-1)+1	Monthly max. time current③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3656H + 32H*(MM-1)+2	Monthly max. time current③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3656H + 32H*(MM-1)+3 <LSB> / 3656H + 32H*(MM-1)+4 <MSB>	Monthly max. current③	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
365BH + 32H*(MM-1)	Monthly max. date current phaseN	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
365BH + 32H*(MM-1)+1	Monthly max. time Current phaseN	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
365BH + 32H*(MM-1)+2	Monthly max. time Current phaseN	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
365BH + 32H*(MM-1)+3 <LSB> / 365BH + 32H*(MM-1)+4 <MSB>	Monthly max. Current phaseN	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
3660H + 32H*(MM-1)	Monthly max. date current average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3660H + 32H*(MM-1)+1	Monthly max. time current average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3660H + 32H*(MM-1)+2	Monthly max. time current average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3660H + 32H*(MM-1)+3 <LSB> / 3660H + 32H*(MM-1)+4 <MSB>	Monthly max. current average	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
3665H + 32H*(MM-1)	Monthly min. date current①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3665H + 32H*(MM-1)+1	Monthly min. time current①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3665H + 32H*(MM-1)+2	Monthly min. time current①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3665H + 32H*(MM-1)+3 <LSB> / 3665H + 32H*(MM-1)+4 <MSB>	Monthly min. current①	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
366AH + 32H*(MM-1)	Monthly min. date current②	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
366AH + 32H*(MM-1)+1	Monthly min. time current②	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
366AH + 32H*(MM-1)+2	Monthly min. time current②	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
366AH + 32H*(MM-1)+3 <LSB> 366AH + 32H*(MM-1)+4 <MSB>	Monthly min. current②	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
366FH + 32H*(MM-1)	Monthly min. date current③	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
366FH + 32H*(MM-1)+1	Monthly min. time current③	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
366FH + 32H*(MM-1)+2	Monthly min. time current③	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
366FH + 32H*(MM-1)+3 <LSB> 366FH + 32H*(MM-1)+4 <MSB>	Monthly min. current③	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
3674H + 32H*(MM-1)	Monthly min. date current phaseN	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3674H + 32H*(MM-1)+1	Monthly min. time current phaseN	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3674H + 32H*(MM-1)+2	Monthly min. time current phaseN	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3674H + 32H*(MM-1)+3 <LSB> 3674H + 32H*(MM-1)+4 <MSB>	Monthly min. current phaseN	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
3679H + 32H*(MM-1)	Monthly min. date current average	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3679H + 32H*(MM-1)+1	Monthly min. time current average	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3679H + 32H*(MM-1)+2	Monthly min. time current average	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3679H + 32H*(MM-1)+3 <LSB> 3679H + 32H*(MM-1)+4 <MSB>	Monthly min. current average	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
38A4H + 28H*(MM-1)	Monthly max. date Phase voltage①	–	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
38A4H + 28H*(MM-1)+1	Monthly max. time Phase voltage①	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
38A4H + 28H*(MM-1)+2	Monthly max. time Phase voltage①	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
38A4H + 28H*(MM-1)+3 <LSB> 38A4H + 28H*(MM-1)+4 <MSB>	Monthly max. Phase voltage①	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
38A9H + 28H*(MM-1)	Monthly max. date Phase voltage②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
38A9H + 28H*(MM-1)+1	Monthly max. time Phase voltage②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
38A9H + 28H*(MM-1)+2	Monthly max. time Phase voltage②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
38A9H + 28H*(MM-1)+3 <LSB> 38A9H + 28H*(MM-1)+4 <MSB>	Monthly max. Phase voltage②	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
38AEH + 28H*(MM-1)	Monthly max. date Phase voltage③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
38AEH + 28H*(MM-1)+1	Monthly max. time Phase voltage③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
38AEH + 28H*(MM-1)+2	Monthly max. time Phase voltage③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
38AEH + 28H*(MM-1)+3 <LSB> 38AEH + 28H*(MM-1)+4 <MSB>	Monthly max. Phase voltage③	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
38B3H + 28H*(MM-1)	Monthly max. date Phase voltage average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
38B3H + 28H*(MM-1)+1	Monthly max. time Phase voltage average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
38B3H + 28H*(MM-1)+2	Monthly max. time Phase voltage average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
38B3H + 28H*(MM-1)+3 <LSB> 38B3H + 28H*(MM-1)+4 <MSB>	Monthly max. Phase voltage average	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
38B8H + 28H*(MM-1)	Monthly min. date Phase voltage①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
38B8H + 28H*(MM-1)+1	Monthly min. time Phase voltage①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
38B8H + 28H*(MM-1)+2	Monthly min. time Phase voltage①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
38B8H + 28H*(MM-1)+3 <LSB> 38B8H + 28H*(MM-1)+4 <MSB>	Monthly min. Phase voltage①	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
38BDH + 28H*(MM-1)	Monthly min. date Phase voltage②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
38BDH + 28H*(MM-1)+1	Monthly min. time Phase voltage②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
38BDH + 28H*(MM-1)+2	Monthly min. time Phase voltage②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
38BDH + 28H*(MM-1)+3 <LSB> 38BDH + 28H*(MM-1)+4 <MSB>	Monthly min. Phase voltage②	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
38C2H + 28H*(MM-1)	Monthly min. date Phase voltage③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
38C2H + 28H*(MM-1)+1	Monthly min. time Phase voltage③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
38C2H + 28H*(MM-1)+2	Monthly min. time Phase voltage③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
38C2H + 28H*(MM-1)+3 <LSB> 38C2H + 28H*(MM-1)+4 <MSB>	Monthly min. Phase voltage③	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
38C7H + 28H*(MM-1)	Monthly min. date Phase voltage average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
38C7H + 28H*(MM-1)+1	Monthly min. time Phase voltage average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
38C7H + 28H*(MM-1)+2	Monthly min. time Phase voltage average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
38C7H + 28H*(MM-1)+3 <LSB> 38C7H + 28H*(MM-1)+4 <MSB>	Monthly min. Phase voltage average	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
3A84H+ 28H*(MM-1)	Monthly max. date Line voltage 1-2	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3A84H + 28H*(MM-1)+1	Monthly max. time Line voltage 1-2	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3A84H + 28H*(MM-1)+2	Monthly max. time Line voltage 1-2	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3A84H + 28H*(MM-1)+3 <LSB> 3A84H + 28H*(MM-1)+4 <MSB>	Monthly max. Line voltage 1-2	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
3A89H + 28H*(MM-1)	Monthly max. date Line voltage 2-3	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3A89H + 28H*(MM-1)+1	Monthly max. time Line voltage 2-3	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3A89H + 28H*(MM-1)+2	Monthly max. time Line voltage 2-3	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3A89H + 28H*(MM-1)+3 <LSB> 3A89H + 28H*(MM-1)+4 <MSB>	Monthly max. Line voltage 2-3	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
3A8EH + 28H*(MM-1)	Monthly max. date Line voltage 3-1	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3A8EH + 28H*(MM-1)+1	Monthly max. time Line voltage 3-1	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3A8EH + 28H*(MM-1)+2	Monthly max. time Line voltage 3-1	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3A8EH + 28H*(MM-1)+3 <LSB> 3A8EH+ 28H*(MM-1)+4 <MSB>	Monthly max. Line voltage 3-1	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
3A93H + 28H*(MM-1)	Monthly max. date Line voltage average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3A93H + 28H*(MM-1)+1	Monthly max. time Line voltage average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3A93H + 28H*(MM-1)+2	Monthly max. time Line voltage average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3A93H + 28H*(MM-1)+3 <LSB> 3A93H + 28H*(MM-1)+4 <MSB>	Monthly max. Line voltage average	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
3A98H + 28H*(MM-1)	Monthly min. date Line voltage 1-2	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3A98H + 28H*(MM-1)+1	Monthly min. time Line voltage 1-2	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3A98H + 28H*(MM-1)+2	Monthly min. time Line voltage 1-2	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3A98H + 28H*(MM-1)+3 <LSB> 3A98H + 28H*(MM-1)+4 <MSB>	Monthly min. Line voltage 1-2	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
3A9DH + 28H*(MM-1)	Monthly min. date Line voltage 2-3	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3A9DH + 28H*(MM-1)+1	Monthly min. time Line voltage 2-3	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3A9DH + 28H*(MM-1)+2	Monthly min. time Line voltage 2-3	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3A9DH + 28H*(MM-1)+3 <LSB> 3A9DH + 28H*(MM-1)+4 <MSB>	Monthly min. Line voltage 2-3	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
3AA2H + 28H*(MM-1)	Monthly min. date Line voltage 3-1	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3AA2H + 28H*(MM-1)+1	Monthly min. time Line voltage 3-1	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3AA2H + 28H*(MM-1)+2	Monthly min. time Line voltage 3-1	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3AA2H + 28H*(MM-1)+3 <LSB> 3AA2H + 28H*(MM-1)+4 <MSB>	Monthly min. Line voltage 3-1	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H
3AA7H + 28H*(MM-1)	Monthly min. date Line voltage average	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3AA7H + 28H*(MM-1)+1	Monthly min. time Line voltage average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3AA7H + 28H*(MM-1)+2	Monthly min. time Line voltage average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3AA7H + 28H*(MM-1)+3 <LSB> 3AA7H + 28H*(MM-1)+4 <MSB>	Monthly min. Line voltage average	0.01V	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
3C64H+ 20H*(MM-1)	Monthly max. date PF①	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C64H + 20H*(MM-1)+1	Monthly max. time PF①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3C64H + 20H*(MM-1)+2	Monthly max. time PF①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3C64H + 20H*(MM-1)+3	Monthly max. PF①	0.001	Signed 16bit	FC18H to 3E8H	03H
3C68H + 20H*(MM-1)	Monthly max. date PF②	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C68H + 20H*(MM-1)+1	Monthly max. time PF②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3C68H + 20H*(MM-1)+2	Monthly max. time PF②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3C68H + 20H*(MM-1)+3	Monthly max. PF②	0.001	Signed 16bit	FC18H to 3E8H	03H
3C6CH + 20H*(MM-1)	Monthly max. date PF③	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C6CH + 20H*(MM-1)+1	Monthly max. time PF③	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C6CH + 20H*(MM-1)+2	Monthly max. time PF③	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C6CH + 20H*(MM-1)+3	Monthly max. PF③	0.001	Signed 16bit	FC18H to 3E8H	03H
3C70H+ 20H*(MM-1)	Monthly max. date PF average	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C70H + 20H*(MM-1)+1	Monthly max. time PF average	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C70H + 20H*(MM-1)+2	Monthly max. time PF average	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C70H + 20H*(MM-1)+3	Monthly max. PF average	0.001	Signed 16bit	FC18H to 3E8H	03H
3C74H + 20H*(MM-1)	Monthly min. date PF①	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C74H + 20H*(MM-1)+1	Monthly min. time PF①	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C74H + 20H*(MM-1)+2	Monthly min. time PF①	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C74H + 20H*(MM-1)+3	Monthly min. PF①	0.001	Signed 16bit	FC18H to 3E8H	03H
3C78H + 20H*(MM-1)	Monthly min. date PF②	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C78H + 20H*(MM-1)+1	Monthly min. time PF②	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C78H + 20H*(MM-1)+2	Monthly min. time PF②	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C78H + 20H*(MM-1)+3	Monthly min. PF②	0.001	Signed 16bit	FC18H to 3E8H	03H
3C7CH + 20H*(MM-1)	Monthly min. date PF③	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C7CH + 20H*(MM-1)+1	Monthly min. time PF③	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C7CH + 20H*(MM-1)+2	Monthly min. time PF③	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
3C7CH + 20H*(MM-1)+3	Monthly min. PF③	0.001	Signed 16bit	FC18H to 3E8H	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
3C80H + 20H*(MM-1)	Monthly min. date PF average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3C80H + 20H*(MM-1)+1	Monthly min. time PF average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3C80H + 20H*(MM-1)+2	Monthly min. time PF average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3C80H + 20H*(MM-1)+3	Monthly min. PF average	0.001	Signed 16bit	FC18H to 3E8H	03H
3DE4H + 20H*(MM-1)	Monthly max. date Frequency①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3DE4H + 20H*(MM-1)+1	Monthly max. time Frequency①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3DE4H + 20H*(MM-1)+2	Monthly max. time Frequency①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3DE4H + 20H*(MM-1)+3	Monthly max. Frequency①	0.01Hz	Unsigned 16bit	0H to 270FH	03H
3DE8H + 20H*(MM-1)	Monthly max. date Frequency②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3DE8H + 20H*(MM-1)+1	Monthly max. time Frequency②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3DE8H + 20H*(MM-1)+2	Monthly max. time Frequency②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3DE8H + 20H*(MM-1)+3	Monthly max. Frequency②	0.01Hz	Unsigned 16bit	0H to 270FH	03H
3DECH + 20H*(MM-1)	Monthly max. date Frequency③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3DECH + 20H*(MM-1)+1	Monthly max. time Frequency③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3DECH + 20H*(MM-1)+2	Monthly max. time Frequency③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3DECH + 20H*(MM-1)+3	Monthly max. Frequency③	0.01Hz	Unsigned 16bit	0H to 270FH	03H
3DF0H + 20H*(MM-1)	Monthly max. date Frequency average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3DF0H + 20H*(MM-1)+1	Monthly max. time Frequency average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3DF0H + 20H*(MM-1)+2	Monthly max. time Frequency average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3DF0H + 20H*(MM-1)+3	Monthly max. Frequency average	0.01Hz	Unsigned 16bit	0H to 270FH	03H
3DF4H + 20H*(MM-1)	Monthly min. date Frequency①	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3DF4H + 20H*(MM-1)+1	Monthly min. time Frequency①	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3DF4H + 20H*(MM-1)+2	Monthly min. time Frequency①	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3DF4H + 20H*(MM-1)+3	Monthly min. Frequency①	0.01Hz	Unsigned 16bit	0H to 270FH	03H
3DF8H + 20H*(MM-1)	Monthly min. date Frequency②	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3DF8H + 20H*(MM-1)+1	Monthly min. time Frequency②	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3DF8H + 20H*(MM-1)+2	Monthly min. time Frequency②	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3DF8H + 20H*(MM-1)+3	Monthly min. Frequency②	0.01Hz	Unsigned 16bit	0H to 270FH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
3DFCH + 20H*(MM-1)	Monthly min. date Frequency③	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3DFCH + 20H*(MM-1)+1	Monthly min. time Frequency③	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3DFCH + 20H*(MM-1)+2	Monthly min. time Frequency③	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3DFCH + 20H*(MM-1)+3	Monthly min. Frequency③	0.01Hz	Unsigned 16bit	0H to 270FH	03H
3E00H+ 20H*(MM-1)	Monthly min. date Frequency average	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3E00H + 20H*(MM-1)+1	Monthly min. time Frequency average	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3E00H + 20H*(MM-1)+2	Monthly min. time Frequency average	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3E00H + 20H*(MM-1)+3	Monthly min. Frequency average	0.01Hz	Unsigned 16bit	0H to 270FH	03H
3F64H+ AH*(MM-1)	Monthly max. date voltage unbalancing	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3F64H + AH*(MM-1)+1	Monthly max. time voltage unbalancing	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3F64H + AH*(MM-1)+2	Monthly max. time voltage unbalancing	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3F64H + AH*(MM-1)+3 <LSB> 3F64H + AH*(MM-1)+4 <MSB>	Monthly max. voltage unbalancing	0.001%	Unsigned 32bit	0H to F423FH	03H
3F69H + AH*(MM-1)	Monthly min. date voltage unbalancing	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3F69H + AH*(MM-1)+1	Monthly min. time voltage unbalancing	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3F69H + AH*(MM-1)+2	Monthly min. time voltage unbalancing	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3F69H + AH*(MM-1)+3 <LSB> 3F69H + AH*(MM-1)+4 <MSB>	Monthly min. voltage unbalancing	0.001%	Unsigned 32bit	0H to F423FH	03H
3FDCH + AH*(MM-1)	Monthly max. date current unbalancing	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3FDCH + AH*(MM-1)+1	Monthly max. time current unbalancing	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3FDCH + AH*(MM-1)+2	Monthly max. time current unbalancing	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
3FDCH + AH*(MM-1)+3 <LSB> 3FDCH + AH*(MM-1)+4 <MSB>	Monthly max. current unbalancing	0.001%	Unsigned 32bit	0H to F423FH	03H
3FE1H + AH*(MM-1)	Monthly min. date current unbalancing	—	Unsigned 16bit	Higher Lower yy:00H to 99H, mm:01H to 12H	03H
3FE1H + AH*(MM-1)+1	Monthly min. time current unbalancing	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
3FE1H + AH*(MM-1)+2	Monthly min. time current unbalancing	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
3FE1H +AH*(MM-1)+3 <LSB> 3FE1H +AH*(MM-1)+4 <MSB>	Monthly min. current unbalancing	0.001%	Unsigned 32bit	0H to F423FH	03H
4054H+28H*(MM-1) <LSB> 4054H+28H*(MM-1)+1 <MSB>	Monthly integral active power①(T1)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4056H+28H*(MM-1) <LSB> 4056H+28H*(MM-1)+1 <MSB>	Monthly integral active power②(T1)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4058H+28H*(MM-1) <LSB> 4058H+28H*(MM-1)+1 <MSB>	Monthly integral active power③(T1)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
405AH+28H*(MM-1) <LSB> 405AH+28H*(MM-1)+1 <MSB>	Monthly total integral active power(T1)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
405CH+28H*(MM-1) <LSB> 405CH+28H*(MM-1)+1 <MSB>	Monthly integral active power①(T2)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
405EH+28H*(MM-1) <LSB> 405EH+28H*(MM-1)+1 <MSB>	Monthly integral active power②(T2)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4060H+28H*(MM-1) <LSB> 4060H+28H*(MM-1)+1 <MSB>	Monthly integral active power③(T2)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4062H+28H*(MM-1) <LSB> 4062H+28H*(MM-1)+1 <MSB>	Monthly total integral active power(T2)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
4064H +28H*(MM-1) <LSB> 4064H +28H*(MM-1)+1 <MSB>	Monthly integral active power①(T3)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4066H +28H*(MM-1) <LSB> 4066H +28H*(MM-1)+1 <MSB>	Monthly integral active power②(T3)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4068H +28H*(MM-1) <LSB> 4068H +28H*(MM-1)+1 <MSB>	Monthly integral active power③(T3)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
406AH +28H*(MM-1) <LSB> 406AH +28H*(MM-1)+1 <MSB>	Monthly total integral active power(T3)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
406CH +28H*(MM-1) <LSB> 406CH +28H*(MM-1)+1 <MSB>	Monthly integral active power① (T4)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
406EH+28H*(MM-1) <LSB> 406EH +28H*(MM-1)+1 <MSB>	Monthly integral active power② (T4)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4070H+28H*(MM-1) <LSB> 4070H +28H*(MM-1)+1 <MSB>	Monthly integral active power③ (T4)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
4072H +28H*(MM-1) <LSB> 4072H +28H*(MM-1)+1 <MSB>	Monthly total integral active power(T4)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
4074H +28H*(MM-1) <LSB> 4074H +28H*(MM-1)+1 <MSB>	Monthly integral active power① (T)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4076H +28H*(MM-1) <LSB> 4076H +28H*(MM-1)+1 <MSB>	Monthly integral active power② (T)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4078H +28H*(MM-1) <LSB> 4078H +28H*(MM-1)+1 <MSB>	Monthly integral active power③ (T)	0.001kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
407AH +28H*(MM-1) <LSB> 407AH +28H*(MM-1)+1 <MSB>	Monthly total integral active power(T)	0.001kWh	Unsigned 32bit	0H to B2D05DFDH	03H
4234H +28H*(MM-1) <LSB> 4234H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power① (T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4236H +28H*(MM-1) <LSB> 4236H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power② (T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4238H +28H*(MM-1) <LSB> 4238H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power③ (T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
423AH +28H*(MM-1) <LSB> 423AH +28H*(MM-1)+1 <MSB>	Monthly total integral reactive power(T1)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
423CH+28H*(MM-1) <LSB> 423CH +28H*(MM-1)+1 <MSB>	Monthly integral reactive power① (T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
423EH +28H*(MM-1) <LSB> 423EH +28H*(MM-1)+1 <MSB>	Monthly integral reactive power② (T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4240H +28H*(MM-1) <LSB> 4240H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power③ (T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4242H +28H*(MM-1) <LSB> 4242H +28H*(MM-1)+1 <MSB>	Monthly total integral reactive power(T2)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
4244H +28H*(MM-1) <LSB> 4244H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power① (T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4246H +28H*(MM-1) <LSB> 4246H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power② (T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4248H +28H*(MM-1) <LSB> 4248H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power③ (T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
424AH +28H*(MM-1) <LSB> 424AH +28H*(MM-1)+1 <MSB>	Monthly totalintegral reactive power(T3)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
424CH +28H*(MM-1) <LSB> 424CH +28H*(MM-1)+1 <MSB>	Monthly integral reactive power① (T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
424EH +28H*(MM-1) <LSB> 424EH +28H*(MM-1)+1 <MSB>	Monthly integral reactive power② (T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4250H +28H*(MM-1) <LSB> 4250H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power③ (T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4252H +28H*(MM-1) <LSB> 4252H +28H*(MM-1)+1 <MSB>	Monthly total integral reactive power(T4)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
4254H +28H*(MM-1) <LSB> 4254H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power① (T)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4256H +28H*(MM-1) <LSB> 4256H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power② (T)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4258H +28H*(MM-1) <LSB> 4258H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power③ (T)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
425AH +28H*(MM-1) <LSB> 425AH +28H*(MM-1)+1 <MSB>	Monthly total integral reactive power(T)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
4414H+28H*(MM-1) <LSB> 4414H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power① (T1)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4416H +28H*(MM-1) <LSB> 4416H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power② (T1)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4418H +28H*(MM-1) <LSB> 4418H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power③ (T1)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
441AH +28H*(MM-1) <LSB> 441AH +28H*(MM-1)+1 <MSB>	Monthly totalintegral apparent power(T1)	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
441CH +28H*(MM-1) <LSB> 441CH +28H*(MM-1)+1 <MSB>	Monthly integral apparent power① (T2)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
441EH +28H*(MM-1) <LSB> 441EH +28H*(MM-1)+1 <MSB>	Monthly integral apparent power② (T2)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
4420H+28H*(MM-1) <LSB> 4420H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power③ (T2)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4422H +28H*(MM-1) <LSB> 4422H +28H*(MM-1)+1 <MSB>	Monthly totalintegral apparent power(T2)	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
4424H +28H*(MM-1) <LSB> 4424H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power① (T3)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4426H +28H*(MM-1) <LSB> 4426H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power② (T3)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4428H +28H*(MM-1) <LSB> 4428H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power③ (T3)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
442AH +28H*(MM-1) <LSB> 442AH +28H*(MM-1)+1 <MSB>	Monthly totalintegral apparent power(T3)	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
442CH +28H*(MM-1) <LSB> 442CH +28H*(MM-1)+1 <MSB>	Monthly integral apparent power① (T4)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
442EH +28H*(MM-1) <LSB> 442EH +28H*(MM-1)+1 <MSB>	Monthly integral apparent power② (T4)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4430H +28H*(MM-1) <LSB> 4430H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power③ (T4)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4432H +28H*(MM-1) <LSB> 4432H +28H*(MM-1)+1 <MSB>	Monthly totalintegral apparent power(T4)	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
4434H +28H*(MM-1) <LSB> 4434H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power① (T)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4436H +28H*(MM-1) <LSB> 4436H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power② (T)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4438H +28H*(MM-1) <LSB> 4438H +28H*(MM-1)+1 <MSB>	Monthly integral apparent power③ (T)	0.001 kVAh	Unsigned 32bit	0H to 3B9AC9FFH	03H
443AH +28H*(MM-1) <LSB> 443AH +28H*(MM-1)+1 <MSB>	Monthly total integral apparent power(T)	0.001 kVAh	Unsigned 32bit	0H to B2D05DFDH	03H
45F4H+28H*(MM-1) <LSB> 45F4H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ① (T1)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H

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Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
45F6H +28H*(MM-1) <LSB> 45F6H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ② (T1)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
45F8H +28H*(MM-1) 45F8H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ③ (T1)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
45FAH +28H*(MM-1) <LSB> 45FAH +28H*(MM-1)+1 <MSB>	Monthly total integral active power (export) (T1)	0.001 kWh	Unsigned 32bit	0H to B2D05DFDH	03H
45FCH +28H*(MM-1) <LSB> 45FCH +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ① (T2)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
45FEH +28H*(MM-1) <LSB> 45FEH +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ② (T2)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4600H +28H*(MM-1) <LSB> 4600H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ③ (T2)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4602H +28H*(MM-1) <LSB> 4602H +28H*(MM-1)+1 <MSB>	Monthly total integral active power (export) (T2)	0.001 kWh	Unsigned 32bit	0H to B2D05DFDH	03H
4604H +28H*(MM-1) <LSB> 4604H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ① (T3)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4606H +28H*(MM-1) <LSB> 4606H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ② (T3)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4608H +28H*(MM-1) <LSB> 4608H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ③ (T3)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
460AH +28H*(MM-1) <LSB> 460AH +28H*(MM-1)+1 <MSB>	Monthly total integral active power (export) (T3)	0.001 kWh	Unsigned 32bit	0H to B2D05DFDH	03H
460CH +28H*(MM-1) <LSB> 460CH +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ① (T4)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
460EH +28H*(MM-1) <LSB> 460EH +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ② (T4)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4610H+28H*(MM-1) <LSB> 4610H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ③ (T4)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4612H +28H*(MM-1) <LSB> 4612H +28H*(MM-1)+1 <MSB>	Monthly total integral active power (export) (T4)	0.001 kWh	Unsigned 32bit	0H to B2D05DFDH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
4614H +28H*(MM-1) <LSB> 4614H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ①(T)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4616H +28H*(MM-1) <LSB> 4616H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ② (T)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
4618H +28H*(MM-1) <LSB> 4618H +28H*(MM-1)+1 <MSB>	Monthly integral active power (export) ③(T)	0.001 kWh	Unsigned 32bit	0H to 3B9AC9FFH	03H
461AH +28H*(MM-1) <LSB> 461AH +28H*(MM-1)+1 <MSB>	Monthly total integral active power (export) (T)	0.001 kWh	Unsigned 32bit	0H to B2D05DFDH	03H
47D4H+28H*(MM-1) <LSB> 47D4H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power (export) ① (T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47D6H +28H*(MM-1) <LSB> 47D6H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power (export) ②(T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47D8H +28H*(MM-1) <LSB> 47D8H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power (export) ③(T1)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47DAH +28H*(MM-1) <LSB> 47DAH +28H*(MM-1)+1 <MSB>	Monthly total integral reactive power (export) (T1)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
47DCH +28H*(MM-1) <LSB> 47DCH +28H*(MM-1)+1 <MSB>	Monthly integral reactive power (export) ①(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47DEH +28H*(MM-1) <LSB> 47DEH +28H*(MM-1)+1 <MSB>	Monthly integral reactive power (export) ②(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47E0H +28H*(MM-1) <LSB> 47E0H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power (export) ③(T2)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47E2H +28H*(MM-1) <LSB> 47E2H +28H*(MM-1)+1 <MSB>	Monthly total integral reactive power (export) (T2)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
47E4H +28H*(MM-1) <LSB> 47E4H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power (export) ①(T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47E6H +28H*(MM-1) <LSB> 47E6H +28H*(MM-1)+1 <MSB>	Monthly integral reactive power (export) ②(T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
47E8H +28H*(MM-1) <LSB>	Monthly integral reactive power (export) ③ (T3)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47E8H +28H*(MM-1)+1 <MSB>					
47EAH +28H*(MM-1) <LSB>	Monthly total integral reactive power (export) (T3)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
47EAH +28H*(MM-1)+1 <MSB>					
47ECH +28H*(MM-1) <LSB>	Monthly integral reactive power (export) ①(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47ECH +28H*(MM-1)+1 <MSB>					
47EEH +28H*(MM-1) <LSB>	Monthly integral reactive power (export) ②(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47EEH +28H*(MM-1)+1 <MSB>					
47F0H +28H*(MM-1) <LSB>	Monthly integral reactive power (export) ③(T4)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47F0H +28H*(MM-1)+1 <MSB>					
47F2H +28H*(MM-1) <LSB>	Monthly total integral reactive power (export) (T4)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
47F2H +28H*(MM-1)+1 <MSB>					
47F4H +28H*(MM-1) <LSB>	Monthly integral reactive power (export) ①(T)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47F4H +28H*(MM-1)+1 <MSB>					
47F6H +28H*(MM-1) <LSB>	Monthly integral reactive power (export) ②(T)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47F6H +28H*(MM-1)+1 <MSB>					
47F8H +28H*(MM-1) <LSB>	Monthly integral reactive power (export) ③(T)	0.001 kvarh	Unsigned 32bit	0H to 3B9AC9FFH	03H
47F8H +28H*(MM-1)+1 <MSB>					
47FAH +28H*(MM-1) <LSB>	Monthly total integral reactive power (export) (T)	0.001 kvarh	Unsigned 32bit	0H to B2D05DFDH	03H
47FAH +28H*(MM-1)+1 <MSB>					

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
4A38H+ 6H*(n-1)	Power interruption n date	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
4A38H + 6H*(n-1)+1	Power interruption n time	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
4A38H + 6H*(n-1)+2	Power interruption n time	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
4A38H + 6H*(n-1)+3	Phase of power interruption n	—	Unsigned 16bit	1H:Phase1,2H:Phase2, 3H:Phase3	03H
4A38H + 6H*(n-1)+4 <LSB> / 4A38H + 6H*(n-1)+5 <MSB>	Power interruption n period	1ms	Unsigned 32bit	0H to 3B9AC9FFH	03H
4A74H + 6H*(n-1)	Under voltage n date	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
4A74H + 6H*(n-1)+1	Under voltage n time	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
4A74H + 6H*(n-1)+2	Under voltage n time	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
4A74H + 6H*(n-1)+3	Phase of under voltage n	—	Unsigned 16bit	1H:Phase1,2H:Phase2, 3H:Phase3	03H
4A74H + 6H*(n-1)+4 <LSB> / 4A74H + 6H*(n-1)+5 <MSB>	Under voltage n period	1ms	Unsigned 32bit	0H to 3B9AC9FFH	03H
4AB0H + 6H*(n-1)	Over voltage n date	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
4AB0H + 6H*(n-1)+1	Over voltage n time	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
4AB0H + 6H*(n-1)+2	Over voltage n time	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
4AB0H + 6H*(n-1)+3	Phase of over voltage n	—	Unsigned 16bit	1H:Phase1,2H:Phase2, 3H:Phase3	03H
4AB0H + 6H*(n-1)+4 <LSB> / 4AB0H + 6H*(n-1)+5 <MSB>	Over voltage n period	1ms	Unsigned 32bit	0H to 3B9AC9FFH	03H
4AECH + 6H*(n-1)	Over current n date	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
4AECH + 6H*(n-1)+1	Over current n time	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
4AECH + 6H*(n-1)+2	Over current n time	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
4AECH + 6H*(n-1)+3	Phase of over current n	—	Unsigned 16bit	1H:Phase1,2H:Phase2, 3H:Phase3	03H
4AECH + 6H*(n-1)+4 <LSB> / 4AECH + 6H*(n-1)+5 <MSB>	Over current n period	1ms	Unsigned 32bit	0H to 3B9AC9FFH	03H

* n shows 1 to 10 (1H to AH).

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
4B28H+ 6H*(n-1)	Under current n date	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
4B28H + 6H*(n-1)+1	Under current n time	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
4B28H + 6H*(n-1)+2	Under current n time	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
4B28H + 6H*(n-1)+3	Phase of under current n	—	Unsigned 16bit	1H:Phase1,2H:Phase2, 3H:Phase3	03H
4B28H + 6H*(n-1)+4 <LSB>	Under current n period	1ms	Unsigned 32bit	0H to 3B9AC9FFH	03H
4B28H +6H*(n-1)+5 <MSB>					
4B65H+ 6H*(n-1)	OUT1 Output log n Occurance date	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
4B65H + 6H*(n-1)+1	OUT1 Output log n Occurance time	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
4B65H + 6H*(n-1)+2	OUT1 Output log n Occurance time	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
4BA1H+ 6H*(n-1)	OUT1 Output log n Occurance date	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
4BA1H + 6H*(n-1)+1	OUT1 Output log n Occurance time	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
4BA1H + 6H*(n-1)+2	OUT1 Output log n Occurance time	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7918H+ 4BH*(MM -1)	Monthly max. demand date current1 (T1)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7918H + 4BH*(MM -1)+1	Monthly max. demand time current1(T1)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7918H + 4BH*(MM -1)+2	Monthly max. demand time current1(T1)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7918H + 4BH*(MM -1)+3 <LSB>	Monthly max.demand current1(T1)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
7918H + 4BH*(MM -1)+4 <MSB>					
791DH+ 4BH*(MM -1)	Monthly max. demand date current2 (T1)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
791DH + 4BH*(MM -1)+1	Monthly max. demand time current2(T1)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
791DH + 4BH*(MM -1)+2	Monthly max. demand time current2(T1)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
791DH + 4BH*(MM -1)+3 <LSB>	Monthly max.demand current2(T1)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
791DH + 4BH*(MM -1)+4 <MSB>					
7922H+ 4BH*(MM -1)	Monthly max. demand date current3 (T1)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7922H + 4BH*(MM -1)+1	Monthly max. demand time current3(T1)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7922H + 4BH*(MM -1)+2	Monthly max. demand time current3(T1)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7922H + 4BH*(MM -1)+3 <LSB>	Monthly max.demand current3(T1)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
7922H + 4BH*(MM -1)+4 <MSB>					

*n shows ‘1 to 10’(1H to AH).
*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
7927H+ 4BH*(MM -1)	Monthly max. demand date current1 (T2)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7927H + 4BH*(MM -1)+1	Monthly max. demand time current1(T2)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7927H + 4BH*(MM -1)+2	Monthly max. demand time current1(T2)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7927H + 4BH*(MM -1)+3 <LSB> 7927H + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current1(T2)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
792CH+ 4BH*(MM -1)	Monthly max. demand date current2 (T2)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
792CH + 4BH*(MM -1)+1	Monthly max. demand time current2(T2)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
792CH + 4BH*(MM -1)+2	Monthly max. demand time current2(T2)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
792CH + 4BH*(MM -1)+3 <LSB> 792CH + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current2(T2)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
7931H+ 4BH*(MM -1)	Monthly max. demand date current3 (T2)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7931H + 4BH*(MM -1)+1	Monthly max. demand time current3(T2)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7931H + 4BH*(MM -1)+2	Monthly max. demand time current3(T2)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7931H + 4BH*(MM -1)+3 <LSB> 7931H + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current3(T2)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
7936H+ 4BH*(MM -1)	Monthly max. demand date current1 (T3)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7936H + 4BH*(MM -1)+1	Monthly max. demand time current1(T3)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7936H + 4BH*(MM -1)+2	Monthly max. demand time current1(T3)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7936H + 4BH*(MM -1)+3 <LSB> 7936H + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current1(T3)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
793BH+ 4BH*(MM -1)	Monthly max. demand date current2 (T3)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
793BH + 4BH*(MM -1)+1	Monthly max. demand time current2(T3)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
793BH + 4BH*(MM -1)+2	Monthly max. demand time current2(T3)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
793BH + 4BH*(MM -1)+3 <LSB> 793BH + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current2(T3)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
7940H+ 4BH*(MM -1)	Monthly max. demand date current3 (T3)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7940H + 4BH*(MM -1)+1	Monthly max. demand time current3(T3)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7940H + 4BH*(MM -1)+2	Monthly max. demand time current3(T3)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7940H + 4BH*(MM -1)+3 <LSB> 7940H + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current3(T3)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
7945H+ 4BH*(MM -1)	Monthly max. demand date current1 (T4)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7945H + 4BH*(MM -1)+1	Monthly max. demand time current1(T4)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7945H + 4BH*(MM -1)+2	Monthly max. demand time current1(T4)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7945H + 4BH*(MM -1)+3 <LSB> 7945H + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current1(T4)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
794AH+ 4BH*(MM -1)	Monthly max. demand date current2 (T4)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
794AH + 4BH*(MM -1)+1	Monthly max. demand time current2(T4)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
794AH + 4BH*(MM -1)+2	Monthly max. demand time current2(T4)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
794AH + 4BH*(MM -1)+3 <LSB> 794AH + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current2(T4)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
794FH+ 4BH*(MM -1)	Monthly max. demand date current3 (T4)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
794FH + 4BH*(MM -1)+1	Monthly max. demand time current3(T4)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
794FH + 4BH*(MM -1)+2	Monthly max. demand time current3(T4)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
794FH + 4BH*(MM -1)+3 <LSB> 794FH + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current3(T4)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
7954H+ 4BH*(MM -1)	Monthly max. demand date current1 (T)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7954H + 4BH*(MM -1)+1	Monthly max. demand time current1(T)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7954H + 4BH*(MM -1)+2	Monthly max. demand time current1(T)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7954H + 4BH*(MM -1)+3 <LSB> 7954H + 4BH*(MM -1)+4 <MSB>	Monthly max.demand current1(T)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
7959H+ 4BH*(MM -1)	Monthly max. demand date current2 (T)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7959H + 4BH*(MM -1)+1	Monthly max. demand time current2(T)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7959H + 4BH*(MM -1)+2	Monthly max. demand time current2(T)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7959H + 4BH*(MM -1)+3 <LSB>	Monthly max.demand current2(T)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
7959H + 4BH*(MM -1)+4 <MSB>					
795EH+ 4BH*(MM -1)	Monthly max. demand date current3 (T)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
795EH + 4BH*(MM -1)+1	Monthly max. demand time current3(T)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
795EH + 4BH*(MM -1)+2	Monthly max. demand time current3(T)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
795EH + 4BH*(MM -1)+3 <LSB>	Monthly max.demand current3(T)	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
795EH + 4BH*(MM -1)+4 <MSB>					
7C9CH	Max. demand date active power	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7C9DH	Max. demand time active power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7C9EH	Max. demand time active power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7C9FH<LSB>	Max. demand value active power	0.001 kW	Unsigned 32bit	0H to B2D05DFDH	03H
7CA0H<MSB>					
7CA1H	Max. demand date reactive power	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7CA2H	Max. demand time reactive power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7CA3H	Max. demand time reactive power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7CA4H<LSB>	Max. demand value reactive power	0.001 kvar	Unsigned 32bit	0H to B2D05DFDH	03H
7CA5H<MSB>					
7CA6H	Max. demand year month apparent power	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7CA7H	Max. demand time apparent power	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7CA8H	Max. demand time apparent power	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7CA9H<LSB>	Max. demand value apparent power	0.001 kVA	Unsigned 32bit	0H to B2D05DFDH	03H
7CAAH<MSB>					
7CABH	Max. demand date active power (export)	—	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7CACH	Max. demand time active power (export)	—	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7CADH	Max. demand time active power (export)	—	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7CAEH<LSB>	Max. demand value active power (export)	0.001 kW	Unsigned 32bit	0H to B2D05DFDH	03H
7CAFH<MSB>					

*MM means ‘1H to CH’ for month, January to December.

Data register	Name	Unit	Kind of data	Range: Hexadecimal	Function code
7CB0H	Max. demand date reactive power (export)	–	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7CB1H	Max. demand time reactive power (export)	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7CB2H	Max. demand time reactive power (export)	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7CB3H<LSB> 7CB4H<MSB>	Max. demand value reactive power (export)	0.001 kvar	Unsigned 32bit	0H to B2D05DFDH	03H
7CB5H	Max. demand date current1	–	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7CB6H	Max. demand time current1	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7CB7H	Max. demand time current1	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7CB8H<LSB> 7CB9H<MSB>	Max. demand value current1	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
7CBAH	Max. demand date current2	–	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7CBBH	Max. demand time current2	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7CBCH	Max. demand time current2	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7CBDH<LSB> 7CBEH<MSB>	Max. demand value current2	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H
7CBFH	Max. demand date current3	–	Unsigned 16bit	Higher Lower yy:00H to 99H,mm:01H to 12H	03H
7CC0H	Max. demand time current3	–	Unsigned 16bit	Higher Lower dd:01H to 31H, hh:00H to 23H	03H
7CC1H	Max. demand time current3	–	Unsigned 16bit	Higher Lower min,:00H to 59H, ss:00H to 59H	03H
7CC2H<LSB> 7CC3H<MSB>	Max. demand value current3	0.001A	Unsigned 32bit	0H to 3B9AC9FFH	03H

* ’Range’ is not the measurement range, it shows the data range.

<LSB>: Least Significant Byte
<MSB>: Most Significant Byte

note 1) 03H: Read 06H/10H: Write
2) Data register except specified is “0”.
3) If each setting value is wrote by communication, it memories to internal memory at the same time. Therefore, change setting frequently makes the internal memory’s life short. Avoid to usage like this.
4) Write a data within the range when you write it.

1.5 DL/T645-2007 communication

1.5.1 Overview of DL/T645-2007

Only 2007 version of DL/T645 is supported. Other version is not supported.

◆DL/T645-2007 transmission settings are as below.

Transmission format	8bit
Parity	Even (fixed)
Stop bit	1bit (fixed)
Response time	50ms (fixed)
Stop time between byte	500ms or more

◆Frame format

Frame start number	68H
Address field	A0
	A1
	A2
	A3
	A4
	A5
Frame start symbol	68H
Control code	C
Data field length	L
Data field	DATA
Check code	CS
End symbol	16H

Address field (A0 to A5)

Address (device number) is consisted of 6-byte (12-digit), but the range is 0 to 9999.
(When the number of digit is not filled, it fills it up with '0'.)
Transmission address '999999999999H' is not supported.
Address field supports wild card. It fills it up with AA from the lower to upper without any value.
When it transmits address field, it transmits from lower to upper. (A0 A1 A2 A3 A4 A5)

Ex.) In case of that the address is 55H.

・Correct address field

	Transmission format
Without wild card	55 00 00 00 00 00
With wild card	55 00 AA AA AA AA

・Case that is NG with wild card

Address field	Reason
55 00 00 AA 00 AA	There is '00' between 'AA' and 'AA'.
55 00 00 A0 AA AA	A3 of address field is not 'AA'.

Control code (C)

C							
D7	D6	D5	D4	D3	D2	D1	D0
Transmission direction	Slave response flag	Subsequent frame flag	Function code				

Item		Contents
Transmission direction (D7)	0	Command frame from master
	1	Response frame from slave
Slave response flag (D6)	0	Slave response is correct.
	1	Slave response is wrong.
Subsequent frame flag (D5)	0	No subsequent data
	1	With subsequent data
Function code (D4 to D0)	00000	Vacant
	01000	Not support
	10001	Read out data
	10010	Not support
	10011	Read out transmission address (device number)
	10100	Write data
	10101	Write transmission address (device number)
	10110	Not support
	10111	Change transmission speed
	11000	Change password
	11001	Not support
	11010	Reset integral power
	11011	Not support

Data field length (L)

It is byte count of data field.

Read :L≦200, Write: L≦50 L=0 means no data field.

Data field (DATA)

Data field is consisted of ‘data type’, ‘password’, ‘workers code’, ‘frame number’ and so on.

The content differs according to the control code.

When data is transmitted, 33H is added to each byte. When data is received, 33H is subtracted from each byte.

Ex.) Transmission in case of that data identification is ‘04 03 FF 00 (DI3,DI2,DI1,DI0)’

Code	Value	Calculation
DI3	37	= 04 + 33
DI2	36	= 03 + 33
DI1	32	= FF + 33 (FF + 33 equal 132. But it makes1 byte data, 32.)
DI0	33	= 00 + 33

It transmits from the lower, data field is ‘33 32 36 37(DI0 DI1 DI2 DI3)’.

Ex.) In case of the receiving data is ‘45 34 (N1 N0’. (Receive voltage 112V)

Code	Value	Calculation
N1	12	= 45-33
N0	01	= 34-33

It receives from the lower, it is ‘N0 N1’ and the voltage is 112V.

(It receives with hexadecimal but it doesn’t convert the value subtract 33 to decimal.)

Check code (CS)

It is lower 1 byte in total of all byte from frame start symbol to data field.

Ex.) In case of that the transmission command is '68 01 00 00 00 00 00 68 11 04 33 33 34 33 CS 16',
Check code (CS) is as below.
68 + 01 + 00 + 00 + 00 + 00 + 00 + 68 + 11 + 04 + 33 + 33 + 34 + 33 = 1B3
CS = B3 (CS is lower 1 byte.)

End symbol (16H)

There is 16H at the end of frame.

◆Command for each control code

Read out data

Data read out by the data identifications.

・Command from master; Control code 11H

68H	A0	A1	A2	A3	A4	A5	68H	11H	04H
	Transmission address (A0 to A5 or AAH)							Control code	Data length

⇒ continue

⇒ continue

DI0	DI1	DI2	DI3	CS	16H
Data identification (Add 33H to data identification value)					

・Response from slave (normal)

68H	A0	A1	A2	A3	A4	A5	68H	91H	L
	Transmission address (A0 to A5)								Data length (Data identification byte ＋data byte)

⇒ continue

⇒ continue

DI0	DI1	DI2	DI3	N1	・・・	Nm	CS	16H
Data identification (Add 33H to data identification value)				Data (Add 33H to measuring value and setting value)				

Read out transmission address

It read out the transmission address (device number).

It is available only when master and slave is 1:1.

・Command from master; Control code 13H

68H	AAH	AAH	AAH	AAH	AAH	AAH	68H	13H	00H	CS	16H
	Transmission address (AAH fix)							Control code			

・Response from slave (normal)

68H	A0	A1	A2	A3	A4	A5	68H	93H	06H
	Transmission address read out from slave								

⇒ continue

⇒ continue

A0	A1	A2	A3	A4	A5	CS	16H
Transmission address read out from slave							

*No response when slave is abnormal.

Write data

It is available only with pressing <MODE> key (programming key).
Without pressing programming key, it doesn't response.
For data writing, authorization level (PA0) should be designated, but only '0' is supported.
For workers code, it doesn't record and the code is fixed to '0'.

・Command from master; Control code 14H

Data length (L); Byte count of data identification + Byte count of password authorization level + Byte count of password + Byte count of workers code + Byte count of data to write

68H	A0	A1	A2	A3	A4	A5	68H	14H	L
	Transmission address (A0 to A5 or AAH)							Control code	

⇒ continue

⇒ continue

DI0	DI1	DI2	DI3	PA	P0	P1	P2
Data identification				Authorization level (33H fix)	Password (P2:33H fix)		

⇒ continue

⇒ continue

C0	C1	C2	C3	N1	・・・	Nm	CS	16H
Workers code (33H fix)				Writing data				

・Response from slave (normal)

68H	A0	A1	A2	A3	A4	A5	68H	94H	00H	CS	16H

Write transmission address

It writes the transmission address (device number). It is available only when master and slave is 1:1.
Without pressing programming key, it doesn't response.

・Command from master; Control code 15H

68H	AAH	AAH	AAH	AAH	AAH	AAH	68H	15H	06H
	Transmission address (AAH fix)							Control code	

⇒ continue

⇒ continue

A0	A1	A2	A3	A4	A5	CS	16H
Transmission address to write slave (Add 33H to transmission address value)							

・Response from slave (normal)

68H	A0	A1	A2	A3	A4	A5	68H	95H	00H	CS	16H
	New transmission address										

*No response when slave is abnormal.

Change transmission speed

It changes the transmission speed after it returns the response.

・Command from master; Control code 17H

68H	A0	A1	A2	A3	A4	A5	68H	17H	01H	Z	CS	16H
	Transmission address							Control code		Transmission speed (bit flag)		

Transmission speed (bit flag)	bit	Transmission speed [bps]
	Bit 7	38400
	Bit 6	19200
	Bit 5	9600
	Bit 4	4800
	Bit 3	2400
	Bit 2	1200
	Bit 1	vacant
	Bit 0	vacant

・Response from slave (normal)

68H	A0	A1	A2	A3	A4	A5	68H	97H	01H	Z	CS	16H
	Transmission address									Transmission speed (bit flag)		

Change password

It changes password.

It is available only with pressing <MODE> key (programming key).

Without pressing programming key, it doesn't response.

For changing password, authorization level (PA0) should be designated, but only '0' is supported.

・Command from master; Control code 18H

68H	A0	A1	A2	A3	A4	A5	68H	18H	0CH
	Transmission address							Control code	

⇒ continue

⇒ Continue

DI0	DI1	DI2	DI3	PA	P0	P1	P2
34 3F 33 37 (Add 33H to 01 0C 00 04) (Only "0" is supported.)				Designate authorization level (33H fix)	Designate the present password (P2: 33H fix)		

⇒ continue

⇒ continue

PAn	P0n	P1n	P2n	CS	16H
Authorization level for password to change (33H fix)	New password (P2n: 33H fix)				

・Response from slave (normal)

68H	A0	A1	A2	A3	A4	A5	68H	18H	04H
	Transmission address								

⇒ continue

PAn	P0n	P1n	P2n	CS	16H
Authorization level for changed password (33H fix)	Changed password (P2n: 33H fix)				

Reset integral power

It reset all integral power.

For reset integral power, workers code should be designated, but it doesn't record and the code is fixed to '0'. It is available only with pressing <MODE> key (programming key).

・Command from master; control code 1AH

68H	A0	A1	A2	A3	A4	A5	68H	1AH	08H	⇒
	Transmission address							Control code		continue

⇒ continue

PA	P0	P1	P2	⇒
Authorization level (33H fix)	Password (P2: 33H fix)			continue

⇒ continue

C0	C1	C2	C3	CS	16H
Workers code (33H fix)					

・Response from slave (normal)

68H	A0	A1	A2	A3	A4	A5	68H	9AH	00H	CS	16H

Abnormal command from slave

Control code (C); C0H (Response from slave is abnormal.)
+ Control code when error occurs.

68H	A0	A1	A2	A3	A4	A5	68H	C	01H	ERR	16H
								Control code		Error code (bit flag)	

Contents of error code	Bit flag	Contents
	Bit 7	Not support
	Bit 6	Not support
	Bit 5	Not support
	Bit 4	Not support
	Bit 3	Impossible to change transmission speed
	Bit 2	Password mistake
	Bit 1	No request data
	Bit 0	Other errors

Conditions for no response

With the below conditions, slave doesn't response.

・Parity error
・CS error
・Data length (L) doesn't match byte count.
・Error at write or read of transmission address
・Not press programming key (<MODE> key)

Programming key

Programming key is <MODE> key.

With every display, it is possible to change the settings only when pressing <MODE> key.

1.5.2 Data list

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
04	05	00	00	Transmission protocol	X	–	1	0:Mewtocol, 1:Modbus 2:DL/T645	R/W
			01	Transmission format	X	–	1	0:8bit-Odd, 1:8bit-None 2:8bit-Even	R/W
			02	Stop bit	X	–	1	1, 2	R/W
			03	Response time	XX	ms	1	1 to 99	R/W
04	05	01	01	CT type (2^{nd})	X	A	1	1, 5	R/W
			02	Primary side current of CT	XXXX	A	2	1 to 4000	R/W
			03	VT ratio	XXX.XX	–	3	100 to 60000	R/W
			04	Conversion rate (P) T1	XX.XX	–	2	0 to 9999	R/W
			05	Conversion rate (P) T2	XX.XX	–	2	0 to 9999	R/W
			06	Conversion rate (P) T3	XX.XX	–	2	0 to 9999	R/W
			07	Conversion rate (P) T4	XX.XX	–	2	0 to 9999	R/W
			09	Conversion rate (P)	XX.XX	–	2	0 to 9999	R/W
			0A	Conversion rate(-P) T1	XX.XX	–	2	0 to 9999	R/W
			0B	Conversion rate(-P) T2	XX.XX	–	2	0 to 9999	R/W
			0C	Conversion rate(-P) T3	XX.XX	–	2	0 to 9999	R/W
			0D	Conversion rate(-P) T4	XX.XX	–	2	0 to 9999	R/W
			0F	Conversion rate (-P)	XX.XX	–	2	0 to 9999	R/W
			10	Over current (ON threshold)	XXX.X	0.1%	2	1 to 1200	R/W
			11	Over voltage (ON threshold)	XXX.X	0.1%	2	1000 to 1200	R/W
			12	Under voltage (ON threshold)	XXX.X	0.1%	2	50 to 1000	R/W
			13	Rated voltage	XXX	V	2	100 to 500	R/W
			14	Under current (ON threshold)	XXX.X	0.1%	2	0 to 1000	R/W
			15	Over current (OFF threshold)	XXX.X	0.1%	2	1 to 1200	R/W
			16	Over voltage (OFF threshold)	XXX.X	0.1%	2	1000 to 1200	R/W
			17	Under voltage (OFF threshold)	XXX.X	0.1%	2	50 to 1000	R/W
			18	Under current (OFF threshold)	XXX.X	0.1%	2	0 to 1000	R/W
04	05	02	01	Pulse input IN1	X	–	1	1: 30Hz, 10: Clock correction	R/W
			02	Pulse input IN2	X	–	1	1: 30Hz, 2: 2kHz	R/W
			03	Clock correction	hhmm	–	2	hh: 0 to 23 mm: 0 to 59	R/W
			04	Prescale IN1	XXX.XXX	–	3	1 to 100000	R/W
			05	Prescale IN2	XXX.XXX	–	3	1 to 100000	R/W

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
04	05	02	06	Unit for pulse output OUT1	XXX	–	2	1(0.0001kWh), 2(0.001kWh), 3(0.01kWh) 4(0.1kWh), 5(1kWh), 6(10kWh), 7(100kWh) 100(Stand-by alarm) 101(Under voltage alarm) 102(Over voltage alarm) 103(Power interruption alarm) 104(Current alarm) 105(Active power alarm) 106(Count output 1) 107(Count output 2) 108(Level output) 109(PF alarm) 110(Current harmonics alarm) 111(Voltage harmonics alarm) 112(Current THD alarm) 113(Voltage THD alarm) 114(Current unbalancing alarm) 115(Voltage unbalancing alarm) 116(Under current alarm) 117(Reactive power alarm) 118(Apparent power alarm) 119(Over frequency alarm) 120(Under frequency alarm) 121(Power demand alarm) 122(Current demand alarm)	R/W
			07	Unit for pulse output OUT2	XXX	–	2	1(0.0001kWh), 2(0.001kWh), 3(0.01kWh) 4(0.1kWh), 5(1kWh), 6(10kWh), 7(100kWh) 100(Stand-by alarm) 101(Under voltage larm) 102(Over voltage alarm) 103(Power interruption alarm) 104(Current alarm) 105(Active power alarm) 106(Count output 1) 107(Count output 2) 108(Level output) 109(PF alarm) 110(Current harmonics alarm) 111(Voltage harmonics alarm) 112(Current THD alarm) 113(Voltage THD alarm) 114(Current unbalancing alarm) 115(Voltage unbalancing alarm) 116(Under current alarm) 117(Reactive power alarm) 118(Apparent power alarm) 119(Over frequency alarm) 120(Under frequency alarm) 121(Power demand alarm) 122(Current demand alarm)	R/W
			08	Integral power output target phase OUT1	X	–	1	1:Phase1, 2:Phase2, 3:Phase3, 5:total	R/W
			09	Integral power output target phase OUT2	X	–	1	1:Phase1, 2:Phase2, 3:Phase3, 5:total	R/W

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
04	05	02	0A	Power interruption alarmtarget phaseOUT1	X	–	1	0:All, 1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			0B	Power interruption alarmtarget phaseOUT2	X	–	1	0:All, 1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			0C	Over current alarmtarget phase OUT1	X	–	1	0:All(except phaseN), 1:Phase1, 2:Phase2, 3:Phase3, 4:phaseN	R/W
			0D	Over current alarmtarget phase OUT2	X	–	1	0:All(except phaseN), 1:Phase1, 2:Phase2, 3:Phase3, 4:phaseN	R/W
			0E	Over voltage alarmtarget phase OUT1	X	–	1	0:All, 1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			0F	Over voltage alarmtarget phase OUT2	X	–	1	0:All, 1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			10	Under voltage alarmtarget phase OUT1	X	–	1	0:All, 1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			11	Under voltage alarmtarget phase OUT2	X	–	1	0:All, 1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			12	Active power alarm (ON threshold) OUT1	XXXXXXX.X	kW	4	0 to 29999999	R/W
			13	Active power alarm(phase)1	X	–	1	0:All, 1:Phase1,2:Phase2, 3:Phase3, 5:total	R/W
			14	Active power alarm (ON threshold) OUT2	XXXXXXX.X	kW	4	0 to 29999999	R/W
			15	Active power alarm(phase)2	X	–	1	0:All, 1:Phase1,2:Phase2, 3:Phase3, 5:total	R/W
			16	Stand-by alarm(threshold)OUT1	XXXX	0.1%	2	1 to 1000	R/W
			17	Stand-by alarm (start time)OUT1	XXXX	min	2	0 to 9999	R/W
			18	Stand-by alarm (phase) OUT1	X	–	1	0:All, 1:Phase1,2:Phase2, 3:Phase3	R/W
			19	Stand-by alarm (threshold)OUT2	XXXX	0.1%	2	1 to 1000	R/W
			1A	Stand-by alarm (start time)OUT2	XXXX	min	2	0 to 9999	R/W
			1B	Stand-by alarm (phase) OUT2	X	–	1	0:All, 1:Phase1,2:Phase2, 3:Phase3	R/W
			1C	Preset OUT1	XXXXXX	0.001	3	0 to 999999	R/W
			1D	Preset OUT2	XXXXXX	0.001	3	0 to 999999	R/W
			1E	Integral direction OUT1	X	–	1	0:export, 1:Integral active power (export)	R/W
			1F	Integral direction OUT2	X	–	1	0:export, 1:Integral active power (export)	R/W
			20	Level output 1	X	–	1	0:Pulse OFF, 1:Pulse ON	R/W
			21	Level output 2	X	–	1	0:Pulse OFF, 1:Pulse ON	R/W
			22	Active power alarm (OFF threshold) OUT1	XXXXXXX.X	kW	4	0 to 29999999	R/W
			23	Active power alarm (OFF threshold) OUT2	XXXXXXX.X	kW	4	0 to 29999999	R/W
			24	PF alarm(ON threshold) OUT1	X.XXX	–	2	0 to 1000	R/W
			25	PF alarm (OFF threshold)OUT1	X.XXX	–	2	0 to 1000	R/W

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
04	05	02	26	PF alarm(phase) OUT1	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			27	PF alarm (ON threshold)OUT2	X.XXX	–	2	0 to 1000	R/W
			28	PF alarm (OFF threshold)OUT2	X.XXX	–	2	0 to 1000	R/W
			29	PF alarm(phase) OUT2	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			2A	Current harmonics alarm(ON threshold) OUT1	XXX.XX	0.01%	3	0 to 40000	R/W
			2B	Current harmonics alarm(OFF threshold) OUT1	XXX.XX	0.01%	3	0 to 40000	R/W
			2C	Current harmonics alarm(phase) OUT1	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			2D	Current harmonics alarm(ON threshold) OUT2	XXX.XX	0.01%	3	0 to 40000	R/W
			2E	Current harmonics alarm(OFF threshold) OUT2	XXX.XX	0.01%	3	0 to 40000	R/W
			2F	Current harmonics alarm(phase)OUT2	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			30	Voltage harmonics alarm(ON threshold) OUT1	XXX.XX	0.01%	3	0 to 40000	R/W
			31	Voltage harmonics alarm(OFF threshold) OUT1	XXX.XX	0.01%	3	0 to 40000	R/W
			32	Voltage harmonics alarm(phase)OUT1	X	–	1	0:All,1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			33	Voltage harmonics alarm(ON threshold) OUT2	XXX.XX	0.01%	3	0 to 40000	R/W
			34	Voltage harmonics alarm(OFF threshold) OUT2	XXX.XX	0.01%	3	0 to 40000	R/W
			35	Voltage harmonics alarm(phase)OUT2	X	–	1	0:All,1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			36	Current THD alarm (ON threshold) OUT1	XXX.XX	0.01%	3	0 to 40000	R/W
			37	Current THD alarm (OFF threshold) OUT1	XXX.XX	0.01%	3	0 to 40000	R/W
			38	Current THD alarm (phase) OUT1	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			39	Current THD alarm (ON threshold) OUT2	XXX.XX	0.01%	3	0 to 40000	R/W
			3A	Current THD alarm (OFF threshold) OUT2	XXX.XX	0.01%	3	0 to 40000	R/W
			3B	Current THD alarm (phase) OUT2	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			3C	Voltage THD alarm (ON threshold) OUT1	XXX.XX	0.01%	3	0 to 40000	R/W
			3D	Voltage THD alarm (OFF threshold) OUT1	XXX.XX	0.01%	3	0 to 40000	R/W
			3E	Voltage THD alarm (phase) OUT1	X	–	1	0:All,1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			3F	Voltage THD alarm (ON threshold) OUT2	XXX.XX	0.01%	3	0 to 40000	R/W
			40	Voltage THD alarm (OFF threshold) OUT2	XXX.XX	0.01%	3	0 to 40000	R/W

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
04	05	02	41	Voltage THD alarm (phase) OUT2	X	–	1	0:All,1:Phase1(line1-2), 2:Phase2(line2-3), 3:Phase3(line3-1)	R/W
			42	Under current alarm (phase) OUT1	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			43	Under current alarm (phase) OUT2	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			44	Current unbalancing alarm(ON threshold) OUT1	XXX.XX	0.01%	3	0 to 99999	R/W
			45	Current unbalancing alarm(OFF threshold) OUT1	XXX.XX	0.01%	3	0 to 99999	R/W
			46	Current unbalancing alarm(ON threshold) OUT2	XXX.XX	0.01%	3	0 to 99999	R/W
			47	Current unbalancing alarm(OFF threshold) OUT2	XXX.XX	0.01%	3	0 to 99999	R/W
			48	Voltage unbalancing alarm(ON threshold) OUT1	XXX.XX	0.01%	3	0 to 99999	R/W
			49	Voltage unbalancing alarm(OFF threshold) OUT1	XXX.XX	0.01%	3	0 to 99999	R/W
			4A	Voltage unbalancing alarm(ON threshold) OUT2	XXX.XX	0.01%	3	0 to 99999	R/W
			4B	Voltage unbalancing alarm(OFF threshold) OUT2	XXX.XX	0.01%	3	0 to 99999	R/W
			4C	Reactive power alarm (ON threshold) OUT1	XXXXXXX.X	0.1kvar	4	0 to 29999999	R/W
			4D	Reactive power alarm (OFF threshold) OUT1	XXXXXXX.X	0.1kvar	4	0 to 29999999	R/W
			4E	Reactive power alarm(phase)OUT1	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3,5:total	R/W
			4F	Reactive power alarm (ON threshold) OUT2	XXXXXXX.X	0.1kvar	4	0 to 29999999	R/W
			50	Reactive power alarm (OFF threshold) OUT2	XXXXXXX.X	0.1kvar	4	0 to 29999999	R/W
			51	Reactive power alarm (phase)OUT2	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3,5:total	R/W
			52	Apparent power alarm (ON threshold) OUT1	XXXXXXX.X	0.1kVA	4	0 to 29999999	R/W
			53	Apparent power alarm (OFF threshold) OUT1	XXXXXXX.X	0.1kVA	4	0 to 29999999	R/W
			54	Apparent power alarm (phase)OUT1	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3,5:total	R/W
			55	Apparent power alarm (ON threshold) OUT2	XXXXXXX.X	0.1kVA	4	0 to 29999999	R/W
			56	Apparent power alarm (OFF threshold) OUT2	XXXXXXX.X	0.1kVA	4	0 to 29999999	R/W
			57	Apparent power alarm (phase)OUT2	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3,5:total	R/W
			58	Over frequency alarm (ON threshold) OUT1	XXX.XX	0.01Hz	3	0.01 to 100.00	R/W
			59	Over frequency alarm (OFF threshold)OUT1	XXX.XX	0.01Hz	3	0.01 to 100.00	R/W
			5A	Over frequency alarm (phase)OUT1	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
04	05	02	5B	Over frequency alarm (ON threshold) OUT2	XXX.XX	0.01Hz	3	0.01 to 100.00	R/W
			5C	Over frequency alarm (OFF threshold) OUT2	XXX.XX	0.01Hz	3	0.01 to 100.00	R/W
			5D	Over frequency alarm (phase)OUT2	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			5E	Under frequency alarm (ON threshold) OUT1	XXX.XX	0.01Hz	3	0.01 to 100.00	R/W
			5F	Under frequency alarm (OFF threshold) OUT1	XXX.XX	0.01Hz	3	0.01 to 100.00	R/W
			60	Under frequency alarm (phase)OUT1	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			61	Under frequency alarm (ON threshold) OUT2	XXX.XX	0.01Hz	3	0.01 to 100.00	R/W
			62	Under frequency alarm (OFF threshold) OUT2	XXX.XX	0.01Hz	3	0.01 to 100.00	R/W
			63	Under frequency alarm (phase)OUT2	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			64	Power demand alarm (Power type) OUT1	X	–	1	0: active power, 1: reactive power, 2: apparent power, 3: active power(export), 4: reactive power(export)	R/W
			65	Power demand alarm (ON threshold) OUT1	XXXXX.XXX	0.001	4	0 to 99999.999	R/W
			66	Power demand alarm (OFF threshold) OUT1	XXXXX.XXX	0.001	4	0 to 99999.999	R/W
			67	Power demand alarm (target) OUT1	XXXXX.XXX	0.001	4	0 to 99999.999	R/W
			68	Power demand alarm (hysteresis) OUT1	XXX	1%	2	0 to 100%	R/W
			69	Power demand alarm start-time OUT1	XX	1min,	1	1 to 30	R/W
			6A	Power demand alarm (Power type) OUT2	X	–	1	0: active power, 1: reactive power, 2: apparent power, 3: active power(export), 4: reactive power(export)	R/W
			6B	Power demand alarm (ON threshold) OUT2	XXXXX.XXX	0.001	4	0 to 99999.999	R/W
			6C	Power demand alarm (OFF threshold) OUT2	XXXXX.XXX	0.001	4	0 to 99999.999	R/W
			6D	Power demand alarm (target) OUT2	XXXXX.XXX	0.001	4	0 to 99999.999	R/W
			6E	Power demand alarm (hysteresis) OUT2	XXX	1%	2	0 to 100%	R/W
			6F	Power demand alarm start-time OUT2	XX	1min,	1	1 to 30	R/W
			70	Current demand alarm (ON threshold)OUT1	XXX.X	0.1%	2	0 to 1200	R/W
			71	Current demand alarm (OFF threshold)OUT1	XXX.X	0.1%	2	0 to 1200	R/W
			72	Current demand alarm (phase)OUT1	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W
			73	Current demand alarm (ON threshold)OUT2	XXX.X	0.1%	2	0 to 1200	R/W
			74	Current demand alarm (OFF threshold)OUT2	XXX.X	0.1%	2	0 to 1200	R/W
			75	Current demand alarm (phase)OUT2	X	–	1	0:All,1:Phase1, 2:Phase2,3:Phase3	R/W

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
04	05	03	00	Auto-off	XX	min	1	0 to 99 (0: always ON)	R/W
			01	Luminance	X	—	1	1 to 5	R/W
			02	Auto display start	XX	min	1	0 to 99 (0: fix display item)	R/W
			03	Display cycle	XX	min	1	1 to 99	R/W
			04	Temperature correction value	XXX.X	℃	2	-100.0 to 100.0	R/W
			05	Update cycle	XX	100ms	1	1 to 10	R/W
			06	Blinking during alarm output	X		1	0: not blinking, 1:blinking	R/W
04	05	04	01	Time program 1 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			02	Time program 1(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
			03	Time program 2 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			04	Time program 2(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
			05	Time program 3 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			06	Time program 3(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
			07	Time program 4 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			08	Time program 4(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
			09	Time program 5 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			0A	Time program 5(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
			0B	Time program 6 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			0C	Time program 6(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
			0D	Time program 7 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			0E	Time program 7(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
			0F	Time program 8 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			10	Time program 8(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
			11	Time program 9 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			12	Time program 9(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
			13	Time program 10 (time-zone)	X		1	0:OFF, 1:T1, 2:T2, 3:T3, 4:T4	R/W
			14	Time program 10(start-time)	hhmm		2	hh:0 to 23, mm:0 to 59	R/W
04	05	05	00	Power demand type	X	—	1	0:peak demand, 1:sliding block, 2:fixed block, 3:30-min demand	R/W
			01	Power demand interval1	XX	1min,	1	1 to 60	R/W
			02	Power demand interval2	XX	1min,	1	1 to 60	R/W
			03	Current demand interval	XX	1min,	1	1 to 60	R/W
			04	30-min demandcalcuration method	X	—	1	0:addition, 1:average	R/W
			05	Power input type	X	—	1	0:CT inpuit 1:pulse input	R/W
			06	Pulse type	X	—	1	0:kWh, 1:Pulse	R/W
			07	Pulse rate (electric power conversion)	XXX.XXX	0.001 kWh	3	1 to 100000	R/W
			08	Pulse constant value	X	pulse/ kWh	1	0:50000, 1:2000	R/W

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
00	01	00	00	Total integral active power	XXXXXX.XX	kWh	4	0 to 999999.99	R
	15			Integral active power (1)	XXXXXX.XX	kWh	4	0 to 999999.99	R
	29			Integral active power (2)	XXXXXX.XX	kWh	4	0 to 999999.99	R
	3D			Integral active power (3)	XXXXXX.XX	kWh	4	0 to 999999.99	R
00	0B	00	00	Total integral reactive power	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	1F			Integral reactive power (1)	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	33			Integral reactive power (2)	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	47			Integral reactive power (3)	XXXXXX.XX	kvarh	4	0 to 999999.99	R
00	09	00	00	Total integral apparent power	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	1D			Integral apparent power (1)	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	31			Integral apparent power (2)	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	45			Integral apparent power (3)	XXXXXX.XX	kVAh	4	0 to 999999.99	R
00	02	00	00	Total integral export active power	XXXXXX.XX	kWh	4	0 to 999999.99	R
	16			Integral export active power (1)	XXXXXX.XX	kWh	4	0 to 999999.99	R
	2A			Integral export active power (2)	XXXXXX.XX	kWh	4	0 to 999999.99	R
	3E			Integral export active power (3)	XXXXXX.XX	kWh	4	0 to 999999.99	R
00	0C	00	00	Total integral export reactive power	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	20			Integral export reactive power (1)	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	34			Integral export reactive power (2)	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	48			Integral export reactive power (3)	XXXXXX.XX	kvarh	4	0 to 999999.99	R
00	01	40	00	【this month】total Integral active power T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【this month】total Integral active power T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【this month】total Integral active power T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【this month】total Integral active power T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【this month】total Integral active power T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	15	40		【this month】 Integral active power① T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【this month】 Integral active power① T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【this month】 Integral active power① T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【this month】 Integral active power① T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【this month】 Integral active power① T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	29	40		【this month】 integral active power② T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【this month】 Integral active power② T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【this month】 Integral active power② T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【this month】 Integral active power② T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【this month】 Integral active power② T4	XXXXXX.XX	kWh	4	0 to 999999.99	R

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
00	3D	40	00	【this month】Integral active power③ T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【this month】Integral active power③ T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【this month】Integral active power③ T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【this month】Integral active power③ T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【this month】Integral active power③ T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	0B	40		【this month】Total integral reactive power T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【this month】Total integral reactive power T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【this month】Total integral reactive power T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【this month】Total integral reactive power T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【this month】Total integral reactive power T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	1F	40		【this month】Integral reactive power① T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【this month】Integral reactive power① T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【this month】Integral reactive power① T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【this month】Integral reactive power① T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【this month】Integral reactive power① T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	33	40		【this month】Integral reactive power② T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【this month】Integral reactive power② T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【this month】Integral reactive power② T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【this month】Integral reactive power② T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【this month】Integral reactive power② T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	47	40		【this month】Integral reactive power③ T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【this month】Integral reactive power③ T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【this month】Integral reactive power③ T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【this month】Integral reactive power③ T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【this month】Integral reactive power③ T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
00	09	40	00	【this month】Total integral apparent power T	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		01		【this month】Total integral apparent power T1	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		02		【this month】Total integral apparent power T2	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		03		【this month】Total integral apparent power T3	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		04		【this month】Total integral apparent power T4	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	1D	40		【this month】Integral apparent power① T	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		01		【this month】Integral apparent power① T1	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		02		【this month】Integral apparent power① T2	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		03		【this month】Integral apparent power① T3	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		04		【this month】Integral apparent power① T4	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	31	40		【this month】Integral apparent power② T	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		01		【this month】Integral apparent power② T1	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		02		【this month】Integral apparent power② T2	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		03		【this month】Integral apparent power② T3	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		04		【this month】Integral apparent power② T4	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	45	40		【this month】Integral apparent power③ T	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		01		【this month】Integral apparent power③ T1	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		02		【this month】Integral apparent power③ T2	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		03		【this month】Integral apparent power③ T3	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		04		【this month】Integral apparent power③ T4	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	02	40		【this month】Total Integral active power (export) T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【this month】Total Integral active power (export) T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【this month】Total Integral active power (export) T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【this month】Total Integral active power (export) T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【this month】Total Integral active power (export) T4	XXXXXX.XX	kWh	4	0 to 999999.99	R

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
00	16	40	00	【this month】Integral active power (export) ① T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【this month】Integral active power (export) ① T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【this month】Integral active power (export) ① T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【this month】Integral active power (export) ① T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【this month】Integral active power (export) ① T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	2A	40		【this month】Integral active power (export) ② T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【this month】Integral active power (export) ② T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【this month】Integral active power (export) ② T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【this month】Integral active power (export) ② T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【this month】Integral active power (export) ② T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	3E	40		【this month】Integral active power (export) ③ T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【this month】Integral active power (export) ③ T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【this month】Integral active power (export) ③ T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【this month】Integral active power (export) ③ T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【this month】Integral active power (export) ③ T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	0C	40		【this month】Total Integral reactive power (export) T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【this month】Total Integral reactive power (export) T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【this month】Total Integral reactive power (export) T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【this month】Total Integral reactive power (export) T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【this month】Total Integral reactive power (export) T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	20	40		【this month】 Integral reactive power (export) ① T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【this month】Integral reactive power (export) ① T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【this month】Integral reactive power (export) ① T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【this month】Integral reactive power (export) ① T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【this month】Integral reactive power (export) ① T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
00	34	40	00	【this month】Integral reactive power (export) ② T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【this month】Integral reactive power (export) ② T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【this month】Integral reactive power (export) ② T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【this month】Integral reactive power (export) ② T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【this month】Integral reactive power (export) ② T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	48	40		【this month】Integral reactive power (export) ③ T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【this month】Integral reactive power (export) ③ T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【this month】Integral reactive power (export) ③ T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【this month】Integral reactive power (export) ③ T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【this month】Integral reactive power (export) ③ T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
00	01	00	MM	【MM-month before】Total integral active power T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【MM-month before】Total integral active power T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【MM-month before】Total integral active power T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【MM-month before】Total integral active power T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【MM-month before】Total integral active power T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	15	00		【MM-month before】 Integral active power① T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【MM-month before】 Integral active power① T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【MM-month before】 Integral active power① T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【MM-month before】 Integral active power① T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【MM-month before】 Integral active power① T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	29	00		【MM-month before】 Integral active power② T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【MM-month before】 Integral active power② T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【MM-month before】 Integral active power② T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【MM-month before】 Integral active power② T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【MM-month before】 Integral active power② T4	XXXXXX.XX	kWh	4	0 to 999999.99	R

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
00	3D	00	MM	【MM-month before】 Integral active power③ T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【MM-month before】 Integral active power③ T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【MM-month before】 Integral active power③ T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【MM-month before】 Integral active power③ T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【MM-month before】 Integral active power③ T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	0B	00		【MM-month before】total Integral reactive power T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【MM-month before】total Integral reactive power T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【MM-month before】total Integral reactive power T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【MM-month before】total Integral reactive power T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【MM-month before】total Integral reactive power T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	1F	00		【MM-month before】 Integral reactive power① T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【MM-month before】 Integral reactive power① T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【MM-month before】 Integral reactive power① T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【MM-month before】 Integral reactive power① T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【MM-month before】 Integral reactive power① T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	33	00		【MM-month before】 Integral reactive power② T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【MM-month before】 Integral reactive power② T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【MM-month before】 Integral reactive power② T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【MM-month before】 Integral reactive power② T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【MM-month before】 Integral reactive power② T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	47	00		【MM-month before】 Integral reactive power③ T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【MM-month before】 Integral reactive power③ T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【MM-month before】 Integral reactive power③ T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【MM-month before】 Integral reactive power③ T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【MM-month before】 Integral reactive power③ T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R

*MM means 1 to 11 (DI0:01H to 0BH).

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
00	09	00	MM	【MM-month before】Total integral apparent power T	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		01		【MM-month before】Total integral apparent power T1	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		02		【MM-month before】Total integral apparent power T2	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		03		【MM-month before】Total integral apparent power T3	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		04		【MM-month before】Total integral apparent power T4	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	1D	00		【MM-month before】Integral apparent power① T	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		01		【MM-month before】Integral apparent power① T1	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		02		【MM-month before】Integral apparent power① T2	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		03		【MM-month before】Integral apparent power① T3	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		04		【MM-month before】Integral apparent power① T4	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	31	00		【MM-month before】Integral apparent power② T	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		01		【MM-month before】Integral apparent power② T1	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		02		【MM-month before】Integral apparent power② T2	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		03		【MM-month before】Integral apparent power② T3	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		04		【MM-month before】Integral apparent power② T4	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	45	00		【MM-month before】Integral apparent power③ T	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		01		【MM-month before】Integral apparent power③ T1	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		02		【MM-month before】Integral apparent power③ T2	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		03		【MM-month before】Integral apparent power③ T3	XXXXXX.XX	kVAh	4	0 to 999999.99	R
		04		【MM-month before】Integral apparent power③ T4	XXXXXX.XX	kVAh	4	0 to 999999.99	R
	02	00		【MM-month before】Total integral active power (export) T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【MM-month before】Total integral active power (export) T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【MM-month before】Total integral active power (export) T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【MM-month before】Total integral active power (export) T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【MM-month before】Total integral active power (export) T4	XXXXXX.XX	kWh	4	0 to 999999.99	R

*MM means 1 to 11 (DI0:01H to 0BH).

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
00	16	00	MM	【MM-month before】Integral active power (export) ① T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【MM-month before】Integral active power (export) ① T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【MM-month before】Integral active power (export) ① T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【MM-month before】Integral active power (export) ① T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【MM-month before】Integral active power (export) ① T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	2A	00		【MM-month before】Integral active power (export) ② T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【MM-month before】Integral active power (export) ② T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【MM-month before】Integral active power (export) ② T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【MM-month before】Integral active power (export) ② T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【MM-month before】Integral active power (export) ② T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	3E	00		【MM-month before】Integral active power (export) ③ T	XXXXXX.XX	kWh	4	0 to 999999.99	R
		01		【MM-month before】Integral active power (export) ③ T1	XXXXXX.XX	kWh	4	0 to 999999.99	R
		02		【MM-month before】Integral active power (export) ③ T2	XXXXXX.XX	kWh	4	0 to 999999.99	R
		03		【MM-month before】Integral active power (export) ③ T3	XXXXXX.XX	kWh	4	0 to 999999.99	R
		04		【MM-month before】Integral active power (export) ③ T4	XXXXXX.XX	kWh	4	0 to 999999.99	R
	0C	00		【MM-month before】Total integral reactive power (export) T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【MM-month before】Total integral reactive power (export) T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【MM-month before】Total integral reactive power (export) T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【MM-month before】Total integral reactive power (export) T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【MM-month before】Total integral reactive power (export) T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	20	00		【MM-month before】Integral reactive power (export) ① T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【MM-month before】Integral reactive power (export) ① T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【MM-month before】Integral reactive power (export) ① T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【MM-month before】Integral reactive power (export) ① T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【MM-month before】Integral reactive power (export) ① T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R

*MM means 1 to 11 (DI0:01H to 0BH).

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
00	34	00	MM	【MM-month before】 Integral reactive power (export) ② T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【MM-month before】 Integral reactive power (export) ② T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【MM-month before】 Integral reactive power (export) ② T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【MM-month before】 Integral reactive power (export) ② T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【MM-month before】 Integral reactive power (export) ② T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
	48	00		【MM-month before】 Integral reactive power (export) ③ T	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		01		【MM-month before】 Integral reactive power (export) ③ T1	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		02		【MM-month before】 Integral reactive power (export) ③ T2	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		03		【MM-month before】 Integral reactive power (export) ③ T3	XXXXXX.XX	kvarh	4	0 to 999999.99	R
		04		【MM-month before】 Integral reactive power (export) ③ T4	XXXXXX.XX	kvarh	4	0 to 999999.99	R
01	01	00	00	【this month】Max. demand active power occurrence time T	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		01		【this month】Max. demand active power occurrence time T1	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		02		【this month】Max. demand active power occurrence timeT2	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		03		【this month】Max. demand active power occurrence time T3	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		04		【this month】Max. demand active power occurrence time T4	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
01	0B	00	00	【this month】Max. demand reactive power occurrence time T	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		01		【this month】Max. demand reactive power occurrence time T1	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		02		【this month】Max. demand reactive power occurrence time T2	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		03		【this month】Max. demand reactive power occurrence time T3	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		04		【this month】Max. demand reactive power occurrence time T4	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R

*MM means 1 to 11 (DI0:01H to 0BH).

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
01	09	00	00	【this month】Max. demand apparent power occurrence time T	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R
		01		【this month】Max. demand apparent power occurrence time T1	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R
		02		【this month】Max. demand apparent power occurrence time T2	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R
		03		【this month】Max. demand apparent power occurrence time T3	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R
		04		【this month】Max. demand apparent power occurrence time T4	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R
01	02	00	00	【this month】Max. demand active power (export) occurrence time T	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		01		【this month】Max. demand active power (export) occurrence time T1	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		02		【this month】Max. demand active power (export) occurrence time T2	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		03		【this month】Max. demand active power (export) occurrence time T3	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		04		【this month】Max. demand active power (export) occurrence time T4	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
01	0C	00	00	【this month】Max. demand reactive power (export) occurrence time T	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		01		【this month】Max. demand reactive power (export) occurrence time T1	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		02		【this month】Max. demand reactive power (export) occurrence time T2	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		03		【this month】Max. demand reactive power (export) occurrence time T3	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		04		【this month】Max. demand reactive power (export) occurrence time T4	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R

*MM means 1 to 11 (DI0:01H to 0BH).

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
01	01	00	MM	【MM-month before】 Max.demand active power occurrence time T	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		01		【MM-month before】 Max.demand active power occurrence time T1	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		02		【MM-month before】 Max.demand active power occurrence time T2	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		03		【MM-month before】 Max.demand active power occurrence time T3	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		04		【MM-month before】 Max.demand active power occurrence time T4	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
01	0B	00	MM	【MM-month before】 Max.demand reactive power occurrence time T	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		01		【MM-month before】 Max.demand reactive power occurrence time T1	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		02		【MM-month before】 Max.demand reactive power occurrence time T2	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		03		【MM-month before】 Max.demand reactive power occurrence time T3	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		04		【MM-month before】 Max.demand reactive power occurrence time T4	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
01	09	00	MM	【MM-month before】 Max.demand apparent power occurrence time T	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R
		01		【MM-month before】 Max.demand apparent power occurrence time T1	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R
		02		【MM-month before】 Max.demand apparent power occurrence time T2	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R
		03		【MM-month before】 Max.demand apparent power occurrence time T3	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R
		04		【MM-month before】 Max.demand apparent power occurrence time T4	XX.XXXX YYMMDDHH MM	kVA date, time	8	0 to 99.999	R

*MM means 1 to 11 (DI0:01H to 0BH).

Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
01	02	00	MM	【MM-month before】 Max.demand active power (export) occurrence time T	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		01		【MM-month before】 Max.demand active power (export) occurrence time T1	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		02		【MM-month before】 Max.demand active power (export) occurrence time T2	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		03		【MM-month before】 Max.demand active power (export) occurrence time T3	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
		04		【MM-month before】 Max.demand active power (export) occurrence time T4	XX.XXXX YYMMDDHH MM	kW date, time	8	0 to 99.999	R
01	0C	00	MM	【MM-month before】 Max.demand reactive power (export) occurrence time T	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		01		【MM-month before】 Max.demand reactive power (export) occurrence time T1	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		02		【MM-month before】 Max.demand reactive power (export) occurrence time T2	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		03		【MM-month before】 Max.demand reactive power (export) occurrence time T3	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
		04		【MM-month before】 Max.demand reactive power (export) occurrence time T4	XX.XXXX YYMMDDHH MM	kvar date, time	8	0 to 99.999	R
02	03	00	00	Total instantaneous active power	XX.XXXX	kW	3	-79.999 to 79.999	R
		01		Instantaneous active power (1)	XX.XXXX	kW	3	-79.999 to 79.999	R
		02		Instantaneous active power (2)	XX.XXXX	kW	3	-79.999 to 79.999	R
		03		Instantaneous active power (3)	XX.XXXX	kW	3	-79.999 to 79.999	R
		FF		Instantaneous active power data block			12		

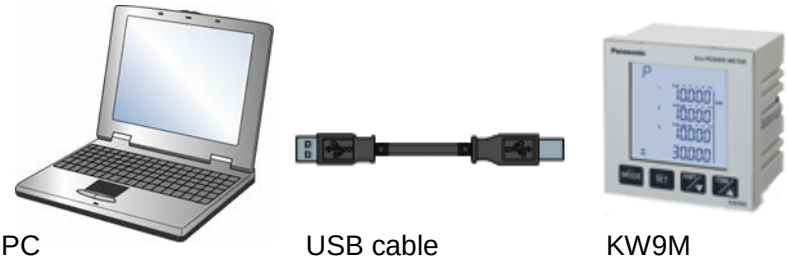
Data identification				Name	Data format	unit	byte	range	R/W
DI_3	DI_2	DI_1	DI_0						
02	04	00	00	Total instantaneous reactive power	XX.XXXX	kvar	3	-79.999 to 79.999	R
		01		Instantaneous reactive power (1)	XX.XXXX	kvar	3	-79.999 to 79.999	R
		02		Instantaneous reactive power (2)	XX.XXXX	kvar	3	-79.999 to 79.999	R
		03		Instantaneous reactive power (3)	XX.XXXX	kvar	3	-79.999 to 79.999	R
		FF		Instantaneous reactive power data block			12		R
02	05	00	00	Total instantaneous apparent power	XX.XXXX	KVA	3	0 to 99.9999	R
		01		Instantaneous apparent power (1)	XX.XXXX	KVA	3	0 to 99.9999	R
		02		Instantaneous apparent power (2)	XX.XXXX	KVA	3	0 to 99.9999	R
		03		Instantaneous apparent power (3)	XX.XXXX	KVA	3	0 to 99.9999	R
		FF		Instantaneous apparent power data block			12		R
02	01	01	00	Voltage 1	XXX.X	V	2	0 to 999.9	R
		02		Voltage 2	XXX.X	V	2	0 to 999.9	R
		03		Voltage 3	XXX.X	V	2	0 to 999.9	R
		FF		Voltage data block			6		R
02	0C	01	00	Line voltage 1-2	XXX.X	V	2	0 to 999.9	R
		02		Line voltage 2-3	XXX.X	V	2	0 to 999.9	R
		03		Line voltage 3-1	XXX.X	V	2	0 to 999.9	R
		FF		Line voltage data block			6		R
02	02	01	00	Current 1	XXX.XXX	A	3	0 to 999.999	R
		02		Current 2	XXX.XXX	A	3	0 to 999.999	R
		03		Current 3	XXX.XXX	A	3	0 to 999.999	R
		FF		Current data block			9		R
02	06	00	00	Power factor (average)	X.XXX		2	-1.000 to 1.000	R
		01		Power factor 1	X.XXX		2	-1.000 to 1.000	R
		02		Power factor 2	X.XXX		2	-1.000 to 1.000	R
		03		Power factor 3	X.XXX		2	-1.000 to 1.000	R
		FF		Power factor data block			8		R
02	80	00	01	Current N	XXX.XXX	A	3	0 to 999.999	R
			02	Frequency (average)	XX.XX	Hz	2	0 to 99.99	R
			07	Temperature	XX.X	℃	2	-99.9 to 99.9	R

*For signed data, the upper bit shows the sign. ‘0’ shows plus and ‘1’ shows minus.

Chapter 2 How to install USB driver

It is necessary to install USB driver (kw9musb_vxxx.inf) for connecting KW9M Eco-POWER METER via USB communication.
* Once installing USB driver, it is not necessary to install from the second time.
* When you change the using port, install the driver again.

Turn on KW9M and connect KW9M and PC via USB cable.
After that, install USB driver according to your OS.



PC USB cable KW9M

Revision History

Issue Date	Manual No.	Content of revision
August, 2013	WUME-KW9MAP-01	First edition
February, 2014	WUME-KW9MAP-02	2nd <firmware version Ver.1.20> <Add functions> - Readout power factor status lag / lead
July, 2014	WUME-KW9MAP-03	3nd <firmware version Ver.1.30> <Add functions> - Reset integral power, count value and log data. - Add registers for total integral power
July, 2015	WUME-KW9MAP-04	4th <firmware version Ver.1.40> <Add functions> - Add registers for cut off current - Add line voltage to range for output target phase

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Specifications are subject to change without notice.

WUME-KW9MAP-04